



52

THE
VISITOR,
OR
MONTHLY INSTRUCTOR
FOR 1839.

THE WORKS OF THE LORD ARE GREAT, SOUGHT OUT OF ALL THEM THAT HAVE PLEASURE THEREIN.
HIS WORK IS HONOURABLE AND GLORIOUS: AND HIS RIGHTEOUSNESS ENDURETH FOR EVER.
HE HATH MADE HIS WONDERFUL WORKS TO BE REMEMBERED: THE LORD IS GRACIOUS, AND
FULL OF COMPASSION.—PSALM CXI. 2—4.

WHATSOEVER THINGS ARE TRUE, WHATSOEVER THINGS ARE HONEST, WHATSOEVER THINGS ARE
JUST, WHATSOEVER THINGS ARE PURE, WHATSOEVER THINGS ARE LOVELY, WHATSOEVER THINGS
ARE OF GOOD REPORT; IF THERE BE ANY VIRTUE, AND IF THERE BE ANY PRAISE, THINK
ON THESE THINGS.—PHILIPPIANS IV. 8.

LONDON:
THE RELIGIOUS TRACT SOCIETY;

Instituted 1799.

SOLD BY JOHN DAVIS, AT THE DEPOSITORY, 56, PATERNOSTER ROW, AND 65, ST. PAUL'S
CHURCHYARD; AND BY THE BOOKSELLERS.

1839.

VISITOR

MONTHLY VISITOR

FOR 1855

WILLIAM TYLER,

PRINTER,

5, BOLT COURT, FLEET STREET.

LONDON

THE REVISED TRACT SOCIETY

1855

INDEX.

- AMUSEMENTS, on worldly, 350
 " And then I will enjoy myself," 76
 Animals, the structure of, 322
 Ants' Nests in Paraguay, 296
 Asia Minor, a pass in, 472
 Aspirations, holy, 394
 Athens, 41
 ——, Modern, 262
 ——, Temple of Theseus in, 262
- BARNABY, Uncle, sentiments about Nobility,
 51
 Baxter's Saint's Rest, 280
 Bee, Honey, cells of the, 231, 254
 Bleaching, 313
 Bliss, heavenly, 319
 Boldness, 200
 Boulogne, 434
 Bouquet and the Bible, the, 359
 Branches, 297
 Bullfinches, school for, 360
- CALABASH, the, 75
 Censoriousness and Charity, 90
 Chase, the, 90
 Chiña, imperial Residence in, 30
- China, great Wall of, 80
 ——, Emperor of, and his Court, 182,
 208
 Christ, the Gospel testifies of, 32
 ——, Deity of, 160
 ——, do I love? 348
 ——, why do you love? 476
 Christian Society, advantages of, 376
 Churchyards—Italy, 80
 Clothing, 6
 Conqueror, a great, 420
 Contentment, 400
 Corinth, 262
 Corn and Grain, 390
 Cotton Spinning, 460
 Crocodiles, taking, 464
 Curiosity, natural, 439
 Custom, singular, 480
 Customs, strange, 470
 Cyclades, a Day's Sail among the, 260
- DAGUERRE's discovery, 478
 Dark Valley made Light, the, 234
 Delay not to do good, 436
 Delight, proper objects of, 80
 Dependence, mutual, 136

- Desires, the, 72
Devotedness, 141
Diligence in using the means of grace, 399
" Do it, and it will be done," 340, 371
Dog, sagacity of a, 71
- ELECTRICITY, atmospheric, 27
_____, Mr. Cross's Apparatus for, 28
Enemies, preparation for, 140
English History—
Henry VII., 121
Henry VIII., 161, 217, 241
Edward VI., 281, 353
Lady Jane Grey, 355
Mary, 377, 401
- FAMILY, the numerous, 447
Flowers, 214
Fly and the Spider, 477
Frogmore Pitch, 63
Fruits, 324
- GARDENS, 440
Gentiles, state of the, 357
Glaciers, progress of the, 6
God, the Unity of, 32
____ is Love, 61
____, sovereignty of, 360
Gospel, necessity of the, 173
Grace, properties of Divine, 16
____, freeness of Divine, 439
Gratitude, motives to, 136
Greece and Asia Minor, reminiscences of, 259
____, first view of, 259
____, education in, 261
- HABITS, evil, 152
____, early, 431, 444
Happiness, 312
" He is but a Child," 238
Holy Spirit, the work of the, 12
Howard, John, the Philanthropist, 1
Humphrey, Old, on rubbing off Old Scores, 18
____ on two Errors, 77
____ on Providential Preservations, 100
____ on the Willow Pattern, 131
____ on plain Writing, 197
____ on a Text of Scripture, 229
____ on earthly Trials, 275
____ on exaggerated Expressions, 292
____ on the Footmarks in the Slough, 332
____ on the gay Dreams of Youth, 387
____ in his old Quarters, 426
____ on Collections in Places of Divine Worship, 456
- " I AM the Way, and the Truth, and the Life," 84
" I cannot afford it," 185
" I will see about it," 143
" If I were you," 364
" If nothing happens to prevent," 23
Indian mode of living, 89
Indolence, 112
Infidelity, 229
Insect Economy, 336
Insects in South America, 67
Intemperance in Cologne, 473
Irish Beggars, 239
- JACKASS, laughing, 113
Jealousies, petty, 300
Jordan, the, 297
Journey from Cairo to Mount Sinai and Jerusalem, 361
KILLARNEY, 376

Knowledge, the most durable, 16
 ————— requires effort, 35
 —————, the best, 192
 —————, early, 212
 —————, sources of, 267
 —————, means and uses of, 308, 327

LEAF, fall of the, and descent of the Sap,
 415

Leaves, 174

Leeches, the; or, Uncle Barnaby on Adap-
 tation, 263

Liberality, Divine, 112

Locusts, swarms of, 320

MADAGASCAR, infanticide in, 70

—————, the people of, 333, 372

Man, an inoffensive, 201

Manner is worthy attention, 320

Meals of the Arabs, 68

Medicine, 192

“Mind how you begin,” 110

Mines, submarine, 316

Mollusca, their structure, 22

—————, powers of locomotion, 95

—————, means of security and defence,
 127

—————, their use, 199

Moss, 57

Mother, influence of, 479

Mountain prospect, a, 43

Mountains, 79, 141

Mourning, scene of, 142

Musical Box, the, 216

NAME, the wonderful, 294

Natural History, progress of, 395

New Year, reflections on the, 4

Nez Perces, the, 88

North America, beyond the Rocky Moun-
 tains, journal of a traveller in, 43, 87,
 140, 438

OCCUPATION, 40

Old Morris Brook, 397

Olives, the Mount of, 428

“Only be faithful,” 176

Opossum, the dog-headed, 418

PANORAMA, the, 157

Parental kindness acknowledged, 256

Passions, the, 192

Penguin, Crested, 337

Perambulator—Shops and Shop-windows,
 116

Persian Muleteers, 349

Pharaoh's Chicken, 257

Photogenic Drawing, 290

Pierre's Hole, battle of, 44

Pine, remarkable, 438

Plants, sap of, 277

—————, age and decay of, 457

Plants and Animals, analogy between, 13

Polar Seas, dangers and sufferings in the, 155

Pride, 56

Principles, 384

Pulley, the, 153

RECONCILIATION, 87

Reflections, 438

Refuge, 38

Religion altogether a work of Divine grace,
 256

Repentance, 160

Reproof, Christian, 32

Rising, early, 85

Roots, 137

Rose-bed of Bengal, 280

Russia, great Fair of, 128

SABBATH, the first, 31

————— in the Wilderness, 88

Salmon River, 142

Salt Springs at Mandrovy, 39

Sceptic, the first, 135

- Science and Revelation, 335
 Scripture Illustrations, 17, 159, 460
 Scriptures, harmony of the, 120
 Sea, the luminous appearance of the, 177
 Sea Elephant, or Proboscis Seal, 441
 Seeds, 97
 Self-will, 152
 Shells, 211, 273
 ———, structure of, 310, 351, 375
 Shepherds, eastern, 201
 Sin, confession of, 474
 Singapore to Japan, expedition from, 465
 First visit to the shore, 466
 Arrival at Oura-gawa, and violent repul-
 sion—The Morison fired upon, 467
 Second repulsion from Japan, 469
 Sins going before to judgment, 103
 Smyrniot Schools, 260
 Solar System, 280
 Spring, 190
 Staffa, 321
 Storm on the banks of the Wye, 233
 Strange Land, the, 393
 Submission, 72

 TEMPLE, ruined, restored, 120
 Thoughtlessness, 66

 Tornado, the, 72
 Tropical Lands, changes of feature in, 397
 Troy, the memorable plains of, 417
 Truth and falsehood, 471

 VAIN Repetitions, 111
 Venezuelans, houses of the, 200
 Vertebral Column, observations on the, 73
 Visiting, district, Dr. Chalmers's letter on,
 33
 Volcanic Chasm, 45

 WATCHMAKER, the, 134
 Way of Escape, 274
 Weathercock, the, 317
 Wheel and Axle, the, 36
 Wilberforce's Practical Christianity, 20
 Wisdom, practical, 464
 Worcester, 81
 World, vanity of the, 32
 Writing on Rods, 399

 YEAR, the last evening of the, 462
 Young Men, dangers of, 8, 46
 ———, moral power of, 148, 193

 ZILLERDALE, the exiles of, 410, 452

LIST

OF

ENGRAVINGS.

	Page		Page
JOHN HOWARD, the Philanthropist....	1	English History :—	
Howard relieving Sick and Destitute		Henry VII. bestowing a Grant on a	
Prisoners	3	Monastic Establishment	121
Eastern Robbers	17	Meeting of Henry VIII. and Francis	
Diagram of Atmospheric Electrical Ap-		at the Field of the Cloth of Gold..	161
paratus	29	Death of Cardinal Wolsey	217
———— Windlass	37	Henry VIII. presenting the English	
———— Capstan	37	Bible to the Clergy and Laity....	241
———— Lantern Wheel	38	Edward VI. showing his reverence for	
Areopagus on Mars' Hill.....	41	the Bible	281
Moss—Hypnum crispum	57	Pope's Legate absolving the Parlia-	
———— Hookeria lucens	60	ment	377
———— Hypnum proliferum	61	Strawberry, showing the Runners on	
Vertebral Column.....	73	each side escaping from the old Root	173
Skeleton of the Neck of the Swan	74	Three Diagrams of the Pulley ..	153, 154
Friar Street, Worcester	81	The Pyrosoma	177
Cabbage Palm, with Cabbage Palm		Arabians sitting at their Tent Doors ..	201
Seed, and the Acorn of Oak	97	Shells	211, 212, 273, 274, 351, 352
Laughing Jackass.....	131	——, the Murex	371

	Page		Page
Shells, the Nautilus	375	Crested Penguin	337
Three Diagrams of Cells of the Honey		Mount Sinai.....	361
Bee	231, 232	Runic Ring	399
Pharaoh's Chicken	257	The Dog-headed Opossum	418
The Jordan	297	The Sea Elephant, or Proboscis Seal ..	441
Staffa	321	Punishment of the Stocks.....	460

THE
VISITOR,
OR
MONTHLY INSTRUCTOR,
FOR 1839.



John Howard, the Philanthropist.

JOHN HOWARD, emphatically and deservedly called "The Philanthropist," was born in the year 1727, at Clapton, near London. He was apprenticed to a grocer, but on the death of his father, JANUARY, 1839.

he purchased the remainder of his time. Though he did not succeed at once to the paternal estate, the interest of the money bequeathed him, enabled him to visit France and Italy, where he

cultivated his taste for the fine arts. On returning to England, in a delicate state of health, he studied some branches of natural philosophy, and the theory of medicine, which, in after life, was of the greatest service. The benevolence of his character was at the same time apparent, in his distribution of large sums to the necessitous.

On the death of his wife, Howard determined to leave England, distributed his furniture among the poorest housekeepers in the neighbourhood, and embarked in a Lisbon packet for Portugal. This vessel was taken by a French privateer, and his captors used him with great cruelty; for, after having kept him forty hours without food or water, he was carried into Brest, where he was confined in a castle, and afterwards in a dungeon. He was subsequently removed to Morlaix, and from thence to Carpaix, where he was on his parole of honour, owing to the humanity of the jailer. He there met with a person, who though an utter stranger to him, supplied him with clothes and money, expecting that he would one day or other be repaid. At length Howard was allowed to visit England, on his promise to return, should the British government refuse to liberate a French naval officer in exchange: this arrangement was happily effected.

To the captivity Howard so unexpectedly endured, he attributed the direction of his mind to the distressed condition of the sick and imprisoned. In the hope of alleviating their sufferings, he resolved on another tour, and again fixed on France, through which he passed to Geneva, visiting many places on his route.

Most distressing were the scenes he often witnessed. Thus in reference to Liege, he says, "In descending deep below the ground, I heard the moans of the miserable wretches in the dark dungeons. The sides and roof were all stone. In wet seasons, the water from the fosses gets into them, and has greatly damaged the floors. The dungeons in the new prison are the abodes of misery still more shocking; and confinement in them so overpowers human nature, as sometimes irrecoverably to take away the senses. I heard the cries of the distracted as I went down them." He therefore endeavoured, in various ways, to mitigate the woes of suffering humanity, and again returned to his native land. Here

he most zealously pursued the same course, seeking also to promote the spiritual interests of his fellow men.

Called in 1773 to the office of High Sheriff of the county of Bedford, he faithfully discharged his new duties. Not only did he pay great attention to the county jail, but to many other prisons; and received in consequence, the thanks of the House of Commons. Thus encouraged, he completed his inspection of the prisons in England, greatly improving the condition of many; and in 1775, after returning from a tour in Ireland and Scotland, he travelled into France, Flanders, Holland, and Germany.

During his absence, on one occasion, a very respectable looking elderly gentleman, with a servant, stopped at an inn very near his house at Cardington, in Bedfordshire, and entered into conversation with the landlord concerning him. He observed that characters often looked well at a distance which would not bear a close inspection, and that he had therefore come expressly to satisfy himself in reference to one of whom he had heard so much. Accompanied by the innkeeper, he examined the house, offices, and gardens, all of which he found in perfect order. He next inquired into Howard's conduct as a landlord, to which honourable testimony was borne; and he returned to the inn, having fully attained the object of his visit. This gentleman was Lord Monboddo.

In the course of one year Howard was much occupied in revisiting the prisons of the British isles; and during the preceding twelve months, he made a circuit on the European continent of 4465 miles. In less than ten years, he travelled, for the reform of prisons, 42,633 miles.

Such was the course that called forth the eulogium of Burke:—"He has visited all Europe, not to survey the sumptuousness of palaces, or the stateliness of temples; not to make accurate measurements of the remains of ancient grandeur, nor to form a scale of the curiosities of modern art; not to collect medals, or collate manuscripts;—but to dive into the depths of dungeons; to plunge into the infection of hospitals; to survey the mansions of sorrow and pain; to take the gauge and dimensions of misery, depression, and contempt; to remember the forgotten, to attend to the

neglected, to visit the forsaken, and compare and collate the distresses of all men in all countries. His plan is original: it is as full of genius as it is of humanity. It was a voyage of discovery, a circumnavigation of charity. Already the benefit of his labour is felt more or less in every country."

The love to man which Howard so remarkably displayed, arose from love to God. His last illness was caught, as he believed, in attending a young lady suffering from malignant fever, at Cherson in Tartary; and during his short but severe affliction, the sentiments he expressed and recorded, were those which had long influenced his mind. Thus he wrote on the cover of one of his memorandum books: "Lord, leave me not to my own wisdom, which is folly, nor to my own strength, which is weakness. Help

me to glorify thee on earth, and finish the work thou givest me to do; and to thy name alone be all the praise." The last of these devout aspirations is inscribed on the cover of the book, and beneath it, evidently written at a somewhat later period, are two short sentences, bearing his dying testimony to his belief in the doctrines, which had led him to place his firm and sole dependence for salvation, on the Rock of Ages. "Oh that the Son of God may not die for me in vain. I think I never look into myself but I find some corruption and sin in my heart. O God! do thou sanctify and cleanse the thoughts of my depraved heart." In the middle of a page of another book, still remaining in pencil, he traced in ink the following sentence in his notes of one of Dr. Stennett's sermons, strikingly characteristic



Howard relieving Sick and Destitute Prisoners.

of his feelings at the near approach of his own dissolution:—"It is one of the noblest expressions of real religion to be cheerfully willing to live or die, as it

may seem meet to God." On the inside of the cover of the book, he has written the following sentence, rendered doubly interesting from its being, in all probability, the last the hand of Howard ever traced:—"Oh that Christ may be magnified in me, either by life or death."

He died on the 20th of January, 1790.

A monument to his memory, of which there is an engraving at the head of this paper, appears in St. Paul's cathedral. The statue represents him in a Roman dress, holding in one hand a scroll of plans for the improvement of prisons and hospitals, and in the other a key, while he tramples chains and fetters under foot.

On page 3 is a bas-relief equally characteristic. The epitaph it bears contains a sketch of his life, concluding with the words: "He trod an open but unfrequented path to immortality, in the ardent and unremitted exercise of Christian charity! May this tribute to his fame excite an emulation of his truly glorious achievements."

REFLECTIONS ON THE NEW YEAR.

CAN it be that another year has fled? With all its joys and trials, all its sins and duties, all its instructions and privileges—is it fled? Yes, it is gone. It has terminated the lives of millions, and like an irresistible current, has borne them on to the grave and the judgment. It has gone. Like a dream of the night, it has gone!

Amid the rapids of time, there are few objects a man observes with less care and distinctness than himself. To one standing on the shore, the current appears to pass by with inconceivable swiftness; but to one who is himself gliding down the stream, the face of this vast extent of waters is unruffled, and he is not aware how rapidly the current bears him away. It is only by looking towards the shore, by discerning here and there a distant landmark, by casting his eye back upon the scenery that is retiring from his view, that he sees he is going forward. And how fast! The tall pine that stands alone on the mountain's brow, casts its shade far down the valley; while the huge promontory throws its shadow almost immeasurably on the plain below. It is but a few years, and I was greeting life's opening day. But

yesterday, I thought myself approaching its meridian. To-day I look for those meridian splendours, and they are either wholly vanished, or just descending behind the evening cloud. I cannot expect to weather out the storms of this tempestuous clime much longer. A few more billows on these dangerous seas, perhaps a few days of fair weather are the most I can look for, before I am either shipwrecked, or reach my desired haven.

Why fly these years so rapidly? It is in anticipation rather than retrospect, that men put too high an estimate upon earthly things. I have to-day trodden on the place of my fathers' sepulchres. I have been playing with the willow and the cypress that weep over their dust. The generations of men dwell here. Yes, here they are. Those whom I have loved, and still love, and hope to love, are here. "The fashion of this world passeth away." The fair fabric of earthly good is built upon the sand. It rocks and falls under the first stroke of the tempest. "Man, at his best estate, is altogether vanity." It is well that it is so. Were it otherwise, we should put far off the evil day, and live as if we flattered ourselves with immortality on the earth. When the Duke of Venice showed Charles the Fifth the treasury of St. Mark, and the glory of his princely palace, instead of admiring them, he remarked, "These are the things that make men so loth to die."

On what rapid wings has this last year sped its course! How sure and certain an approximation to the close of this earthly existence! Every year adds to what is past, and leaves less to come. "What is your life? It is even a vapour, that appeareth for a little time, and then vanisheth away." What is it when compared with the amount of labour to be accomplished, and the magnitude of the interests at stake? What is it compared with the facility with which it may be interrupted, and the ten thousand causes of decay and dissolution it is destined to encounter? What is it, compared with the ever-enduring existence to which it is an introduction? How fugitive! how frail! Hardly has the weary traveller laid himself down to rest, when he is summoned away to pursue his journey, or called to his everlasting home. "We spend our years as a tale that is told." The flying cloud, the evanescent vapour, the arrow just pro-

pelled from the string, the withering grass, the flower whose beauty scarcely blooms ere it is faded, and whose fragrance is scarcely perceptible ere it is gone, are apt similitudes of the life of man.

I am but a wanderer, a pilgrim, a sojourner on the earth. Though every thing is cheerful about me, I feel to-day, exiled and alone. A thousand recollections crowd upon my mind to remind me of the past, to premonish me of the future, and to lead me to some just conceptions of the present. This world is not my home. I have made it my resting-place too long. I hear a voice to-day, in accents sweet as angels use, whispering to my lonely heart, "Arise, and depart hence; for this is not your rest!" I am away from my Father's house. I have felt vexations and trials. I have experienced disappointments and losses. I have known the alienation of earthly friends. I am not a stranger to dejected hopes. I know something of conflicts within. But now and then I have a glimpse of the distant and promised inheritance, which more than compensates me for all. It is no grief of heart to me that I have no enduring portion beneath the sun. I am but a passing traveller here. I would fain feel like one who is passing from place to place, and going from object to object, with his eye fixed on some long-wished for abode beyond; while every successive scene brings me nearer to the end of my course, and all these earthly vicissitudes endear to me the hopes of that final rest. To live here, however happily, however usefully, however well, must not be my ultimate object. I was born for eternity. Nay, I am the tenant of eternity even now. Time belongs to eternity. It is a sort of isthmus, or rather a little gulf, with given demarcations, set off and bounded by lines of ignorance; but it mingles with the boundless flood, it belongs to eternity still. A great change, indeed, awaits us, We must drop this tabernacle and go into a world of spirits. But we shall be in the same duration. I must live for eternity.

In entering on another year, I know not from what unexpected quarter, or at what an unguarded hour, difficulties and dangers may come. Oh that I could enjoy more of the favour of God, more of the presence of the Saviour, more of the sealing of the ever-blessed Spirit! Oh for more of a calm, ap-

proving conscience, and more of the delightful influence of the peace-speaking blood of Jesus Christ! From some cause or other, I begin this year with a trembling heart. I fear I may lose my way. I am afraid lest I should turn aside from the strait path; lest I may repose in the bower of indolence and ease; lest I may sleep on enchanted ground; lest I should be ensnared, if not destroyed by an unhallowed curiosity; lest I should be betrayed by my own presumption and self-confidence. I can remember some who have forsaken the way and fallen into snares; and the sad memorials of their folly are strewn along my path. Why should I hope to pass unwatched or unmolested? The enemy is not asleep. Many a time have I been baffled by his artifices. Rest where I will, and rise when I may, he is always at my side. And shall I dream of peace? Shall I not watch and pray? Will not presumption and sloth cost me dear? Blessed God, hold thou me up, and I shall be safe! Pity thy erring creature. Forgive thy wandering child. Keep, and with the bounties of thy grace, bless thy poor suppliant. Preserve him another year. Let him not be conformed to this world. Give him a warm and humble heart. Let nothing interrupt, or retard his progress toward the Zion above!

I would live another year, if it be my heavenly Father's will. And yet I would not live to sin, and fall, and reproach my Saviour and his blessed cause. Better die than live to no good purpose! I would live till my work is done; cheerful when it is most arduous, and grateful for strength according to my day. But I would not be afraid to die. Shall the child desire to be away from his father's house? Shall the traveller, already weary, choose to have his stay in the wilderness prolonged? It were a sad sight to see a Christian die with regret; to see him go home as if he were going to a prison! Oh let me think much and often of my heavenly home!

Jerusalem, my happy home!

Name ever dear to me!

When shall my labours have an end,

In joy and peace and thee?

Jerusalem, my happy home!

My soul still pants for thee;

Then shall my labours have an end,

When I thy joys shall see."

Let me then often climb the mount of contemplation, and prayer, and praise, and there try to catch a glimpse of the

glory to be revealed, and get my cold heart affected with a view of its yet distant endearments. Love to God, communion with God, devotedness to God, these are the foretastes of heaven. If through the cares and duties of secular life, I cannot preserve an invariable tendency of mind towards that holy world, let it be a more habitual and frequent tendency! I feel the sorrows of this guilty insensibility, this languor of spiritual affection, and long for those halloved moments when the meltings of contrition, the fervours of desire, the vividness of faith, and the hope full of immortality shall shed their sacred fragrance over my spirit, and make me pant for heaven. Nor let it be a transient emotion, kindled by some momentary excitement, or awakened by some impulse of the imagination; but marked by all the ardour of passion, and all the constancy of principle. Spirit of the Redeemer! shed abroad thine own love in this poor heart of mine, and thus seal it to the day of eternal redemption. Let me greet every truth, every providence, every meditation that shall invite me to more intimate intercourse with Heaven. Let me dwell upon the communications sent down from that blessed world to cheer my fainting spirit, and revive my courage by the way. Let me welcome those messages of Divine Providence that are designed and adapted to intercept my constant view of earth, and bring the realities of eternity near. Let me grieve at nothing that makes me familiar with heaven. Let me never mourn when some little stream of comfort and joy is dried up, and I am driven more directly to the fountain. Let me take a fresh departure for the land of promise from the beginning of this new year. I would fain look upward with a more stedfast eye, and march onward with a firmer step. Nor would I lose sight of "the cloud by day, and the pillar of fire by night," but go where it goes, and rest where it rests.

And who? who will remain behind? Who will be content to have his hopes bounded by the narrow scenes of earth? Go up, fellow-traveller, to eternity, go up to some selected eminence of thought, where the splendours of the holy city shall break upon your view. This world is not your home any more than mine. It cannot comfort you, more than it has comforted me. You may be called away

from all its scenes as soon as I. Your journey to the grave may be shorter even than mine. Nay, this year, thou mayest die.—*Dr. Spring.*

CLOTHING.

COULD I dip my pen into some subtle fluid, which, affecting the eye of the reader, would descend to his heart, and call forth all its humane affections; or, what would be better still, could I make the reader feel at the same moment the misery that poverty endures, and the exulting glow of joy that spreads itself in the bosom of benevolence and Christian charity, when relieving the wants of penury, then should I be sure that my weak words would be influential in the mitigation of distress.

In the absence of these advantages, let me make an honest appeal to kindly bosoms and Christian sympathies, and without drawing on my imagination for fancied sufferings and overwrought scenes of wretchedness, I would, in a plain and simple way, beseech you to lend a helping hand at this trying season of the year, in bestowing an additional garment on the shivering frame of much-enduring poverty.

There are many among the lower walks of life, who in days gone by, have known the luxury of suitable winter clothing. Time was when a good great coat, or a warm winter cloak, was hardly an object with them: when they needed those things, they had wherewithal to procure them; but

"Old times are changed, old manners gone;" and the scanty clothing of summer, is all that they now possess to fence out the frost, and protect them from the snow. That there are such, respectable in their poverty, cannot be doubted; and this admitted, it follows that they have a claim on the charity of their better clad brethren and sisters.

Not a word have I to say in behalf of those

Who lost to sense of shame and more than poor,
Drest up in rags besiege the gin-shop door;
Who madly rush on ruin, grief, and pain,
And drink to drown their wretchedness in vain.

To give to these, is to give to the pawnbroker and the publican, and to increase that misery which benevolence has not power to relieve. A more than mortal hand is required to arrest them in their

career to destruction; their backs want not clothing so much as their hearts want changing.

If your spirit be kindly, your eye will be quick to discern suitable objects of benevolence, and your hand ready to mete out ungrudgingly, according to your ability, some additional comforts for the poor. Look over your wardrobe: that which has ceased to be useful to you may be very useful to another. Is there no great coat too much worn at the elbows and the collar, to appear respectable? no gown whose colours are faded, or cloak that is getting rather shabby? You may have overlooked these things. Now, then, I beseech you begin a closer inspection!

If we cannot literally act up to the standard, "He that hath two coats let him impart to him that hath none; and he that hath meat, let him do likewise," Luke iii. 11, let us, at least, show that we are not insensible to the winter wants of others, while we abundantly and unsparingly provide for our own.

It is a custom as common even among the middle ranks of life, to provide for the winter, as it is to prepare clean clothes for the Sabbath day: a stock of coals, a stock of provisions, and a stock of clothing seem almost indispensable.

Something more substantial is worn from head to foot, than in warmer seasons. Now this very custom is an argument, and a strong one, too, in behalf of the poor. If you, well-housed and well-fed, with a hearth whose cheerful blaze seems to defy the driving sleet and the freezing blast, feel unequal to endure the coming cold without additional defence, how shall the ill-lodged sons and daughters of penury, the ill-fed, and the fireless, wage war with the trying elements? Come! come! do your best to minister to their wants, and at the same time to add to your own satisfaction.

Every load of coals that is bought for the winter, every piece of beef that is sent in for your dinner, every pair of blankets ordered for the winter, and every garment of additional warmth that is then purchased, is a witness that you think these things to be necessary.

Seek out the deserving, but be not too severe to scan the infirmities of your kind when their wants are urgent. Err, if you do err, on the side of mercy. How would it be with us if our comforts altogether depended on our deserts? "If

thou, Lord, shouldest mark iniquities, O Lord, who shall stand? but there is forgiveness with thee, that thou mayest be feared," Psalm cxxx. 3, 4.

If all well-fed, well-clad householders were, in the depth of winter, to pass one night covered with a blanket less than ordinary, to sit down to one meal of potatoes and salt, to spend one hour in a cold, fireless room, and to walk abroad one mile, without putting on additional clothing, it would be a means of feelingly teaching them to bless God for their own comforts, and it would eloquently plead the cause of the poor.

You who have the means, do good while you can. Many a proud eagle has been pierced on the wing, many a tall tree is blown down by the storm, and many a rich man is unexpectedly made poor! The privations and sorrows of sudden adversity are bitter enough, without their being rendered more so by the remembrance of begrudging parsimony and hard-hearted churlishness. If you love yourselves, give of your abundance. Cast your bread upon the waters, that you may find it after many days.

Earnestly would I address all conditions of men that have the means of doing good: merchants, whose wealth is increased by every returning ship; bankers, who have princely incomes; and tradesmen, who are thriving in the world. While the stream of your prosperity is full, let not the channels of your benevolence be empty. Let this season find you open-hearted and open-handed. If you have been abundantly blessed, show a grateful spirit in blessing others, and while you sit down to a well-spread feast of comforts, give freely of your abundance to the poor.

In the Book of books, I find no blessing necessarily attached to riches; but I do find the words, "Blessed is he that considereth the poor: the Lord will deliver him in time of trouble. The Lord will preserve him, and keep him alive; and he shall be blessed upon the earth. The Lord will strengthen him upon the bed of languishing." Surely these blessings are not to be despised! I put it to you, if amid your most joyous moments, when ministering only to your own pleasures, you have ever felt gathering round your hearts anything half so cordial as the grateful glow of satisfaction, that the consciousness of having relieved distress never fails to bestow?

Oh it is a good and glorious thing to

have the will and the ability to bless those round about you! You will neither merit nor obtain heaven by your gifts, give what you may; for what can you bestow that God has not in his goodness already conferred upon you! but you will thereby cheer hearts that are drooping, and minister to your own peace and joy.

Householders! Look about you, and as you value comfort, try to extend it to others. Know you none to whom a garment would be as a gift from Heaven? You are not wont to be blind to a rent in your own coats; then open your eyes at this frosty season, to the rents in the coats of your poorer neighbours.

Matrons! Ye know what poor defences cotton petticoats and gowns are against the frost and the snow; and hundreds there are who have no better. To such, a flannel petticoat, or a well lined stuff or cloth cloak, would be a gift that would warm the very heart of the wearer. Be persuaded to be a little more charitable than ordinary.

Churchmen! Let not the words of the litany be a heartless, profitless petition, when ye put up the prayer to the Father of mercies, "That it may please thee to succour, help, and comfort all that are in danger, necessity and tribulation. That it may please thee to defend and provide for the fatherless children and widows, and all that are desolate and oppressed."

Dissenters of all denominations! Be not behindhand with your brother Christians, but rather strive to outdo them in deeds of charity. Your Bible tells you, "It is more blessed to give than to receive, and that "God loveth a cheerful giver," 2 Cor. ix. 7.

And you, who are called Quakers, but more appropriately "Friends," now prove yourselves to be "friends in need and indeed" to the poor.

To all, and to every one possessing the means, and especially to those who have an abundance, I speak urgently. Glance a kindly eye over your stores, look over your pickle tubs, your dried hams and flitches, your stock of salt butter, and grocery, and especially your wardrobes. The cold wintry wind is whistling abroad while I write: it may be pleasant music to those who are wrapped up in good broad cloth, and comfortable flannel, but somewhat sharp and discordant to him whose thickest coat is thin and threadbare, and to her whose scanty

gown and petticoat are fitter for July than January.

See what you can do for the decayed householder, the superannuated matron, the widow and the fatherless, and let not the comforts of your bed and board, let not your food and raiment cry out against you, "You have received liberally, but you give niggardly. You are well clothed, but you pity not the naked; you warm yourselves, but you leave others to starve!"

The poor often excuse themselves from attending Divine worship on the Sabbath, on account of their clothes. They are ashamed to go in so poor a coat, or in so wretched a gown; and how is this case met? Why by the observation that they should go to worship God, and not to regard or to be regarded by men. No doubt this assertion is a correct one; but when we make it, can we act up to it? We all too much regard the opinion of others in Divine things, and must not wonder that the poor do the same thing. We should, therefore, bear a little with their weaknesses and common infirmities. If the gift of a garment may be the means of sending those to the house of God, who otherwise would not attend, it is a gift well bestowed; for it may be a means, not only of shielding the body from the cold, but of defending the soul from temptation and sin.

I feel my deficiency in thus pleading the cause of the poor, and can only hope that with the blessing of the Most High, the bitter and biting blast of winter on the one hand, and the humanity of your hearts on the other will plead it better. We shall all do well, especially in trying seasons, to remember our poorer brethren, and to bear in mind the words of the wise man, "There is that scattereth, and yet increaseth; and there is that withholdeth more than is meet, but it tendeth to poverty. The liberal soul shall be made fat: and he that watereth shall be watered also himself," Prov. xi. 24, 25.

DANGERS OF YOUNG MEN.—No. I.

MY YOUNG FRIENDS;—In order to appreciate the evil which it is in your power to do, by a life of irreligion and sin, it is necessary to consider the circumstances of responsibility in which you are placed; the physical, intellectual, social, and moral constitution with which you

are endowed ; the nature and amount of your obligations, as they respect yourself, your parents, your family, your Maker, civil society, the Divine government, the temporal and everlasting welfare of all to whom you stand in any way related, or whom your influence can ever reach ; the good which you may do, and the ultimate amount of good which you may destroy. Consider also, what high authority it is which has said, "One sinner destroyeth much good."

Capacity to rise high in excellence and glory, is capacity to sink deep in ruin and perdition. The lobster has not capacity to rise much ; for the same reason he has not capacity to sink much. The brute is incapable of procuring to himself, on the one hand, anything more than a few physical and transient benefits ; for the same reason he is incapable of procuring to himself, on the other hand, anything more than a few physical and transient evils. Not so with man. The same capacities and opportunities which enable him to rise to the everlasting character and enjoyments of angels, enable him to sink to the everlasting character and miseries of devils. Let us then notice some of the evils which it is in your power to do to yourself and to others.

I. To yourself.

1. You can ruin your physical constitution. You can do this, even by many means which the brute itself cannot command. You can employ your superior intellect in inventing and contriving ways to enervate your body, induce incurable disease, and conduct you, through a course of severe sufferings, to an early grave. Some of the most intense physical agonies which I ever witnessed, were those which a young man brought upon himself by sensual vices. Many a young man has, in a very short time, inconsiderately and wickedly ruined one of the finest constitutions ever framed ; so that he has either dug for himself an early grave, or compelled himself to drag out an existence so useless and miserable, as to have considered death itself almost better.

2. You can ruin your pecuniary interests and prospects. By a course of indolence, inattention, waste, prodigality, amusements and pleasures in your early years, you may fatally exile yourself from all the means and hopes of ever rising from a state of abject and servile dependence. And even if you have

begun and proceeded well for a season, you are not secure. It may cost a man years of toil to obtain the means of a comfortable and honourable subsistence ; but a few short hours may decoy him into those improvident measures, to which that man is exposed, who "hath an evil eye," or "hasteth to be rich," which will reduce you to poverty and mortification for life.

3. You can ruin your intellect. This is a talent committed to your keeping and culture, far more precious than all the treasures of silver and gold. You may waste it by neglect ; you may enervate it by indolence and indulgence ; you may derange it by excess ; you may debase it by sensuality ; you may rend and destroy its fine mechanism by sinful passions ; and by how much higher than the brute you might rise, through a right use of your intellect, so much deeper than the brute may you sink, through the abuse of it. No ruin is more common, nor yet more disastrous, than that connected with a fallen intellect.

4. You can ruin your conscience. You may silence its faithful admonitions ; you may stifle its convictions of truth and duty ; you may falsely educate it, so that it will put evil for good, and good for evil ; you may defile it ; you may sear it, "as with a hot iron ;" you may so utterly ruin its integrity and its power, as that this faithful advocate of the Divine law will no longer disturb your sinful course, but the more you sin the less will it admonish you—thus leaving you unrebuked to fill up the measure of your iniquity. What earthly ruin more dreadful and hopeless, than that of a prostrated or perverted conscience !

5. You can ruin your reputation. However difficult it may be to secure a good name, it is very easy to lose it. It is of slow growth, but it may be destroyed in a day. An eminently wise man has said, "A good name is rather to be chosen than great riches." Yet in a single hour, the corruption previously cherished and ripened in your heart, may fix a dark stain upon your fair name which no tears can ever wash away, or repentance remove ; but which will cleave to you, to be known and read by all men till the grave receives you from their sight. You may even render yourself an object of the universal disgust and abhorrence of the good, and of the taunt and scorn of the wicked ; so that wher-

ever you turn your eyes, you will find none to bestow upon you a single smile of complacency. How many in this condition, bitterly realizing that "without a friend the world is but a wilderness," have, in a paroxysm of desperation, committed suicide!

6. You can ruin your affections. You may so entirely and fatally alienate your heart from God, that it will never find any delight in him or his service. You may so educate and enslave it to sin as to render prayer a burden, benevolent effort a painful task, the society of the virtuous and pious unpleasant, all religious duties disagreeable, and heaven itself a place of torment; so that, rather than engage in its holy employments and sympathize in its interests and joys, you would even share your dreadful portion with "dogs, and sorcerers, and whoremongers, and murderers, and idolaters, and whosoever loveth and maketh a lie." Thus may you utterly ruin the moral character of your soul for eternity.

7. You can ruin your opportunities of salvation. You may neglect all the overtures of mercy through Christ; you may "always resist the Holy Ghost;" under the numerous commands, admonitions, warnings, and invitations of God, which you receive, you may continue to cherish an impenitent heart, and persist in sin and impiety, till your probation terminates—till you drop into eternity, and your "redemption ceaseth for ever." Thus, while you have ample means and opportunities granted you of ascending to God, and to angelic glory and happiness, you have also ample means and opportunities of descending, by a life of sin, through a broken law and a rejected gospel, to deep and remediless perdition. And oh! what ruin is like that of the soul! To the spirit in moral ruin, with the "great gulf fixed" between it and heaven, with what burning significance might the language be applied, "How art thou fallen from heaven, O Lucifer, son of the morning!" That which was made to live and shine and rejoice on high—which might have been employing its immortal and ever-growing powers with angelic minds and voices in the "paradise of God," is fallen into the dreadful abyss of remediless sin and perdition!

Would that the amount of the evil ended here. But no! far from it. It is one of the most malignant and appalling aspects of sin, that its disastrous effects

are not confined to its original author. What an example of this have we in the case of our first parents! What is said of Achan in the Divine record, will prove true of every incorrigible sinner, that he "perished not alone in his iniquity."

II. Let us then notice some of the evils which you may do to others.

1. You can be an occasion of grief and anguish to your parents. The debt of love and gratitude which you owe them is far greater than you will ever realize, until you stand in the same relation. What a thrill of joy was felt in the bosom of that parent, when it was announced to him that he was the father of a son! In a moment his thoughts traced you up to manhood, and made you the support and solace of his declining age. They followed you onward through your remaining life, into the scenes and duties in which you might be called to perpetuate his name, interest, usefulness and honour amongst the living, even after he should be slumbering in the dust. Through long years he watched over you, with a solicitude known only to a parent's heart; every symptom in you for good or evil, he noticed with intense interest; to supply your constant wants, his hands never refused to toil; to afford you the best means of instruction and improvement, he deemed no personal effort too great. He would do anything for your good, even to the sacrifice of his own life. If a man of piety, with what intense desires did he daily bear you on his heart before God, that the object of his love and hope might share with him an eternal portion in heaven!

That mother, too! Think of her pains and sorrows, who yet "remembered no more the anguish, for joy that a son was born into the world." From that moment, she could never love you enough, nor do enough for you. Think of her unwearied attentions; her wakeful and anxious nights; her incessant solicitude to anticipate all your wants, avert your dangers, and relieve your pains, through the weeks, months, and years, of your helpless infancy and childhood. You have no conception how much she has loved you, how much she has done for you. And if her heart were alive to the interests of your soul, perhaps not a day passed from the time you opened your eyes on the light of this world, in which she did not, with fervent prayers and tears, commend you to God.

Do you now ask me how much you owe your parents? I cannot tell; neither can you. You can never love them so much as they have loved you. But I can tell you how you may pay the whole debt—all they ask—all they wish—enough to make them forget all their sacrifices for your sake, and thank God a thousand times for such a son; it is expressed in two short words—DO WELL.

And is it possible that you can refuse so reasonable a demand? Yes, I tremble, when I think of the tremendous power lodged in your bosom; you may requite all the love, labour, anxiety, sorrow, prayers and tears of the best of parents, with coldness, ingratitude, obstinacy, perverseness, and a determined course of evil doing; you can blast all their fondest hopes and cloud their brightest prospects; you can cause them to rue the day in which you were born—yes, you can, as many a ruined son has done, bring down their “gray hairs with sorrow to the grave!”

None but a parent's heart can know the anguish of parting with a sweet babe. But there is an agony deeper and more inconsolable than that. It is occasioned by a vicious son. I have seen one of the tenderest and best of mothers console her mind on the death of a darling child, by the hope that it was with Christ in a better world. On the same day I have seen another mother pour forth, from a heart which no consolations could reach, tears of bitterness over a perverse and wicked son, and have heard her say, “The death of an infant is nothing to this; would that my son had died in his infancy!”

And now, will you conduct yourself in such a manner, as to bring this affliction upon your parents? Will you turn their day into night, and their night into wakeful despair? Will you cause them to wish that you had never been born, or had died in infancy? Or will you rather, by well-doing, pour the richest of all earthly blessings into their bosoms, become their honour and their joy, and cause their declining day to go down in brightness and in hope?

2. You can become an occasion of disgrace and suffering to your whole family. This idea has been partly anticipated. But apart from your relation to parents, you have perhaps brothers and sisters. How much within your power are the peace, honour, and happiness of the whole family of which you are a

member! Go look into that domestic circle. It is a numerous, prosperous, and might have been a happy family. By diligence, with the favour of Providence, the father has secured the means of educating his children, and setting them forth in life with every needful advantage. A domestic, affectionate, and devoted mother, has done her part well towards diffusing sunshine and happiness over the household. The daughters are all that could be desired, to make themselves and their family realize the perfection of domestic bliss—intelligent, industrious, amiable, accomplished, pious. The sons, too, with one exception, are acting well. To most beholders, it is the happiest of families, and frequently an object of envy!

Yet look again more closely. Do you not see the mark of anxiety and affliction on that father's brow? Do you not sometimes discern the unutterable yearnings of a mother's heart depicted on her countenance? Do you never find those sons looking gloomy and sad? Do you not sometimes observe the cheeks of those daughters crimsoned with shame and their eyes red with weeping? What meaneth all this? There is one dissipated son and brother! He is the disgrace and torment of the whole family. He perhaps went from home a fair and promising youth—but he is fallen! And who shall count the tears and the sufferings which his fall has already occasioned? Who can tell how many sorrows yet remain to that distressed and afflicted family, from the conduct of this wretched member? How malignant is sin, that it can shoot its venom so widely, and strike its fangs so deeply, causing the innocent to suffer with the guilty!

But this is not all, nor the worst part. A son, and especially an elder son, has great moral influence over the whole family to which he belongs. Suppose you are living at home with your sisters and younger brothers around you; if you take the downward course, the probability is great, that you will draw some or all of them downward with you. In how many families do we see striking illustrations of this! How frequently does it happen that the happiness of a numerous family turns, in a great measure, upon the character and course of one or two of the elder brothers?

3. You can render yourself a moral nuisance to your neighbourhood and to society. A young man of sceptical

principles or vicious inclinations in a community, spreads a moral contagion around him. He can poison the minds of his associates with infidelity; he can corrupt them by his example; he can allure them into vicious practices; he can teach them to make light of serious truths; he can urge them to profane the sacredness of the sabbath; he can even seduce female innocence and cause others to practise his infernal arts; he can render himself a thousand fold more dangerous and destructive to a community, than ever was cholera, yellow fever, or any other pestilence. Many, many a young man has done all this. If an inscription, faithful to truth, were to be put upon the tomb-stone of many a youth, who has urged his way through a course of vice to an early grave, it would read—"This young man perished not alone in his iniquity!"

4. You can do much towards the destruction of our civil and benevolent institutions. You can easily pursue that course which, if all pursued it, would establish them upon the Rock of Ages, extend the blessings of Christianity to distant lands, and make this nation the rejoicing of the whole earth till the end of time. Or you can take one which, if all pursued it, would soon dash our institutions to the dust, and bring back the world into a long night of desolation and woe. If the bright visions of prophets are to be realized, and the happy reign of light, and peace, and truth are to come, it must be effected in a great measure through the agency of young men of Christian principles, whose chief end is to glorify God and to enjoy him for ever. If our civil and religious institutions are to sink, if iniquity is to triumph, and a reign of darkness is to tyrannize over the earth for coming ages, it will be effected principally by the perverted power of young men, destitute of Christian principles, reckless, vain, pleasure-loving, selfish devotees of "the lusts of the flesh, the lusts of the eye, and the pride of life."

5. You can be instrumental to the perdition of souls. All the other evils to which I have referred, are lighter than a feather, compared with this. You cannot but know something of the power and certainty of moral causes; you cannot but be aware that an influence is continually emanating from you for good or evil, to affect the characters of others; and if you have any faith in the truths of Divine inspiration, you believe

that there is a connexion between the character formed here, and the condition of the soul hereafter. You are, then, touching moral chords now, which will vibrate in eternity. In that world of retribution you will therefore be recognized as accessory to the salvation or perdition of souls. How easy it is for you to put forth a disastrous influence tending to shut up the kingdom of heaven against men! How easy to countenance the impiety, dispel the seriousness, pervert the consciences, and harden the hearts of your associates! How easy thus to encourage and help them on in the downward way to perdition! By a single profane jest, you may dissipate a salutary impression made by a sermon or some other cause, upon the minds of your companions, and thereby dispel their convictions of truth, and prevent their becoming pious. You may instil infidelity into their minds; you may encourage them to take shelter in refuges of lies; you may prejudice them against religion; and thus, by various means, you may exert such an influence around you through all your way to the grave, that with a most awful and tremendous emphasis it will at last be said of you, "That man perished not alone in his iniquity;" but he took multitudes down with him to ruin! And if in eternity, they who have turned many to righteousness will shine as the brightness of the firmament, and as the stars for ever and ever, will not they who have turned many away from righteousness, sink into the deepest depths of shame, condemnation and woe?—*Hubbard Winslow.*

THE WORK OF THE HOLY SPIRIT.

WHEN a telescope is directed to some distant landscape, it enables us to see what we could not otherwise have seen; but it does not enable us to see any thing which has not a real existence in the prospect before us. It does not present to the eye any illusive imagery; neither is that a fanciful and fictitious scene which it throws open to our contemplation. The natural eye saw nothing but blue land stretching along the distant horizon. By the aid of the glass, there bursts upon it a charming variety of fields and woods, and spires, and villages. Yet who would say that the glass added one feature to this assemblage? It discovers nothing to us which is not there; nor, out of that por-

tion of the book of nature which we are employed in contemplating, does it bring into view a single character which is not really and previously inscribed upon it. And so of the Spirit. He does not add a single truth, or a single character to the book of Revelation. He enables the spiritual man to see; but the spectacle which he lays open is uniform and immutable. It is the word of God which is ever the same; and he, whom the Spirit of God has enabled to look to the Bible with a clear and affecting discernment, sees no phantom passing before him; but amid all the visionary extravagance with which he is charged, can for every one article of his faith, and every one duty of his practice, make his triumphant appeal to the law and to the testimony.—*Dr. Chalmers.*

ANALOGY BETWEEN PLANTS AND ANIMALS.

PLANTS are organized beings, that, like animals, depend for their existence on nourishment, warmth, air, and light. Their nourishment they derive from the soil, their warmth and air jointly from the soil and the atmosphere, and their light from the sun.

Plants resemble animals in having an organic structure endowed with life, and in requiring nourishment to enable them to continue to exist. They absorb this nourishment through the small tubular fibres of their roots, in the same way as animals do theirs through the small tubes called lacteals, which convey it from their stomachs. Plants differ from animals in being fixed to one spot; in having the principles of vitality and reproduction diffused over every part, and in thus being propagated by division, as well as by ova, or seeds; in being without a brain or nervous system, and, consequently, incapable of feeling; and in light being as necessary to their existence as air is to that of animals.

The soil in which a plant grows is as essential to it as the stomach is to an animal. Food, before it can be absorbed into the system, must be reduced into a pulpy mass, consisting partly of chyle, or nutritious matter, and partly of refuse. This process, in regard to animals, is performed in the stomach, and is called digestion; and, when it is finished, the lacteals suck the chyle from the mass, and convey it to the lungs, where it is

assimilated to the blood, and thence is distributed through the frame.

The food of plants is rotted (a process similar to digestion) in the soil; and is there brought, by the addition of water and gases, to a sufficient state of fluidity, to enable the spongioles of the roots to absorb from it the part necessary for the nourishment of the plant. It is then carried up to the leaves, where it undergoes a process similar to that to which the chyle is subjected in the lungs, and becomes true sap, which contributes to the growth of plants, as blood does to that of animals.

When a plant or an animal is in a state of disease, no application to the leaves and branches of the one, or to the external members of the other, will be of much use, if the soil in the one case, or the stomach in the other, be neglected. The stem and branches of a plant, and the external members of an animal, may be injured, mutilated, and even diseased; but, if the soil or the stomach be invigorated, and placed in a healthy state, the whole plant or animal will soon recover from the injuries it has received, so as to perform all the functions necessary to its existence. The first step, therefore, in cultivating or in improving plants, is, to improve the soil in which they grow.

In all vertebrate animals, there is a part at the back of the neck, between the spinal marrow and the brain, where a serious injury will occasion immediate death. There is a corresponding point in plants, between the root and the stem, which is called the neck or collar; and at this point plants may be more readily injured than any where else. Most plants, also, may be killed, by covering this point too deeply with soil. In all seedling plants, this neck, or vital point, is immediately beneath the seed leaves; and, if the plant be cut over there when in a young state, the part which is left in the ground will infallibly die. In old plants, however, and particularly in herbaceous plants which have creeping stems, and in various kinds of trees and shrubs, the roots, after a plant has attained a certain age, become furnished with buds; and, when the plant or tree is cut over by the collar, these dormant buds are called into action, and throw up shoots, which are called suckers. No sucker, however, is ever thrown up by the roots of a plant cut through at the collar while in its seed leaves. The

branches of a tree may be all cut off close to the trunk, and the roots also partially removed; but, if the collar remain uninjured, the plant, in suitable soil, and under favourable circumstances, will throw out new roots and shoots, and, in time, will completely recover itself.

There are some plants of the herbaceous kind (such as the horse-radish, for example) that do not suffer, even if their collar should be buried two feet or even three feet; but by far the greater number of plants (such as the hepatica, the common daisy, the common grasses, etc.) are killed by having the collar covered two or three inches; and nothing is more injurious to woody plants, whether large or small. It is easy to destroy a large tree by heaping up earth round the base of its trunk; and easy to prevent a small one from growing, by lifting it, and planting it six inches or one foot deeper than it was before. Hence the great importance of not planting any plant deeper in the soil than it was before taking it up. The cause why plants are so much injured by burying the collar has not, as far as we know, been physiologically explained; but it probably proceeds from the want of the action of air on the collar, or on that part of the stem which is immediately above it; or from the pressure of the soil upon that vital point.

The next point of analogy between plants and animals, which it may be useful to notice, is that between the lungs and the leaves. An animal can no more live without its lungs than without its stomach. The stomach, as we have seen, is necessary for the turning of food into chyle, and the lungs for turning that chyle into blood. Now, a plant can no more live and grow without leaves, than an animal can without lungs. The use of the lungs is to expose the chyle to the action of the air, which they decompose, so that its oxygen may unite with the chyle, and thus change it into blood. The leaves of plants, which act to them as lungs, not only decompose air, but light, in the process of elaborating the sap; and hence, plants can no more live without light than without air or food, as light is necessary to turn their food into sap, or, in other words, to bring it into the proper state for affording them nourishment. Hence, in the culture of plants, the great importance of light. An important difference, however, between the circulation of the sap in ve-

getables and the blood in animals, is, that the former have no heart.

Plants and animals are alike in requiring a certain degree of temperature to keep them alive; and the warmth of this temperature differs greatly in the different kinds both of plants and animals. Hence, the constitutional temperature of any plant to be cultivated being known, that temperature must be maintained by art; either by a suitable situation in the open air, or by its culture under a structure which admits the light, and is capable of having its atmosphere heated to any required degree. The temperature which any plant requires is ascertained by its geographical position in a wild state; making some allowance for the difference produced in the habits of the plant by cultivation.

Plants agree with animals in requiring periodical times of rest. In animals, these periods are, for the most part, at short intervals of not more than a day; but, in plants, they are commonly at long intervals, probably of a year. In warm climates, the dormant period of plants commences with the dry season, and continues till the recurrence of the periodical rains which are peculiar to the tropical regions. In temperate countries, the dormant season in plants commences with the cold of winter, and continues till the recurrence of spring. When plants are in a dormant state, they commonly lose their leaves, and, consequently, at that season, they are unable to make use of the nourishment applied to their roots; and hence the injury done to them when they are stimulated with nourishment and warmth, so as to occasion their growth during the period at which they ought to be at rest. Hence, also, arises the injury which plants receive, and especially bulbs, if the soil about them be kept moist by water when they are in a dormant state.

Plants being fixed to the spot where they grow, they necessarily depend for their food, heat, air, and light, on the circumstances peculiar to that spot; and, hence, to increase their growth beyond what it would be if left to nature, additional food must be brought to them, and the warmth, airiness, and lightness of the situation increased. Hence, what is called vegetable culture, which consists in stirring the soil, adding manure to it, regulating the supply of water by draining or irrigation, sheltering from the colder winds, and exposing to the direct

influence of the sun's rays. If we imagine any one of these points attended to, and not the others, the plant will not thrive. Stirring the soil, and mixing it with manure, will be of little use if that soil be liable to be continually saturated with moisture, either from its retentive nature, from springs from below, or from continued rains from above; or if it be continually either entirely without, or with very little moisture, from its porous nature, the want of moisture in the subsoil, and the want of rain and dews from the atmosphere. Improving the soil without improving the climate, (that is, without communicating a proportionate degree of warmth and light,) will increase the bulk of the plant, but without proportionately bringing its different parts to maturity. For example, we will suppose two plantations of trees planted at the same time, in similar soil, and in the same climate; that in the case of the one plantation the soil was trenched and manured, and in the other not; and that the trees were planted in equal numbers in both plantations, and at the same distances. The trees in the prepared soil would grow rapidly, and in the unprepared soil slowly. After a certain number of years, (say twenty,) we shall suppose both plantations cut down; when the timber produced by that which had grown slowly would be found hard, and of good quality; while that produced by the plantation which had grown rapidly, would be found soft, spongy, and, when employed in construction, comparatively of short duration. The reason is, that in this last case, the rate of nourishment to the roots exceeded the natural proportion which nature requires in plants, between the supply of food to the roots, and of light and air to the leaves. Had the trees in the prepared soil been thinned out as they advanced, so as never to allow their branches to do more than barely touch each other, they would have produced a great deal more timber than the trees on the unprepared soil, and that timber would have been of equal firmness and duration with timber of slower growth. It ought, therefore, to be strongly impressed on the minds of amateur cultivators, that though nourishment of the root will produce bulk of the top, or, at least length of top, yet that it is only by abundance of light and air, that quality can be secured.

Light is not necessary for either the functions of the stomach, brain, or lungs,

in animals; but in plants, though it is equally unnecessary for the functions of the root and the collar, it is essentially so for those of the leaves; and the leaves are necessary to the elaboration of the sap, and consequently, to the nourishment of the plant. A plant, therefore, from which the leaves are continually stripped, as soon as they are produced, soon ceases to live. Small and weak plants, from which the leaves are taken off as they are produced, will die in a single season; and this practice, continued for two seasons, will kill, or nearly so, the largest tree. If, instead of stripping a plant of its leaves, the leaves are produced in the absence of light, and light never admitted to them, the effect will be precisely the same. Seeds germinated, or plants struck from cuttings, in the dark, will not exist a single season; nor will trees, or tubers, such as the potato, placed in an apartment from which all light is excluded, live more than two seasons. Hence the importance of light to plants can scarcely be overrated; for while it has been proved, that plants, even of the most perfect kind, will live for many months, or even years, in glass cases in which very little change of air has taken place, there is no instance of plants, even of the lowest kind, such as ferns and mosses, living for any length of time without light. Without light there can be no green in leaves, no colour in flowers, and neither colour nor flavour in fruits.

Plants agree with animals in having a sexual system; but they differ from animals in having, for the most part, both sexes in the same individual.

For the improvement of plants, what is called cross-breeding is employed with great advantage in the vegetable, as it is in the animal kingdom. The two parents must be two varieties of the same species, and their qualities may be different, but must not be opposite. Many of the finest varieties of fruits, culinary vegetables, cereal grains, and grasses, have been produced by cross-breeding.

Plants, like animals, are subject to various diseases, as well as to be preyed on by insects, most of which live on plants till they have completed their larva state. Plants are also injured by being crowded by other plants, either of the same or of different species. When these spring up naturally around the cultivated plants, they are called weeds, and the cultivated plant is cleansed from them by

weeding; as it is in the case of being crowded by its own species, or by other cultivated plants, by thinning. Plants are also injured by epiphytes, which grow on their outer bark, such as mosses and lichens; and by parasites, which root into their living stems and branches, such as the dodder, mistletoe, etc.

The life of plants, like that of animals is limited, but varies in regard to duration. Some plants vegetate, flower, ripen seed, and die, in the course of a few months, and these are called annuals; while others, such as the oak and some other trees, are known to live upwards of a thousand years.

In both plants and animals, decay commences the moment the life is extinct; and in both they are ultimately resolved, first, into a pulpy or other homogeneous mass for manures, and ultimately into certain gases, salts, and earths. After death, the decay, both of animals and plants may be retarded by the same means, namely, drying, exclusion from the air, or saturating with saline or antiseptic substances.—*Loudon's Gardener's Magazine.*

THE MOST DURABLE KNOWLEDGE.

MANY subjects of knowledge there are, wherein by time, or at least by death, knowledge proves useless, or at least the labour therein unprofitable or lost. For instance, I study to be very exact in natural philosophy, the mixtures or conjunctions of qualities, elements, and a thousand such inquiries. Of what use will this be when the world with the works thereof shall be burned up? Or if it should not, what great benefit would this be to a separated soul, which, doubtless, shall either know much more therein without any pains, and so the labour here is lost? or it is such a knowledge as will be inconsiderable or useless to it. And so, and much more for the studies of politics, methods of war, mechanical experiments, languages, laws, customs, histories; all these, within one minute after death, will be as useless as the knowledge of a tailor or shoemaker: they are all adapted to the convenience and use of this life, and with it they vanish. But here is the privilege and advantage that the knowledge of Christ crucified hath; as it serves for this life, so it serves for that to come; and the more it is improved here, the more shall

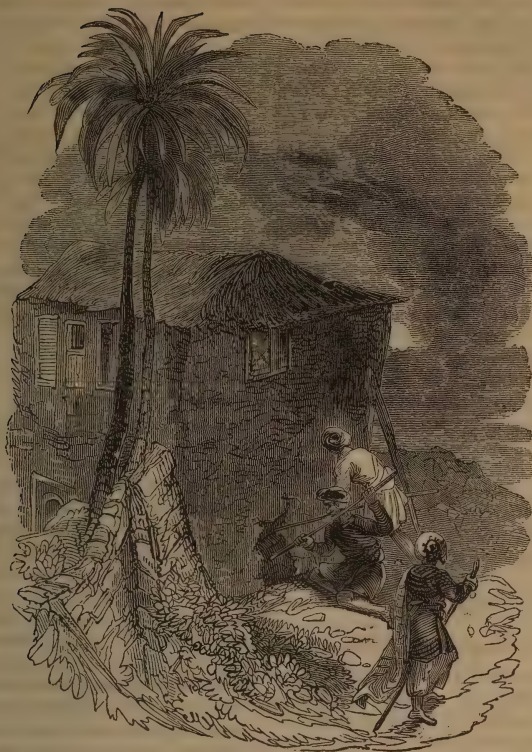
it be dilated hereafter; the higher measure thereof I attain here, the greater measure of glory hereafter. As the more knowledge I have of the mystery of Christ here, the greater is my perception and admiration of the wisdom, and goodness, and love of God; the greater my joy, and complacency, and delight in that sight and sense, and the more my soul is carried out in love and praise and obedience unto him; so in the life to come that knowledge shall improve, and consequently the sense of the wisdom, mercy, and love of God, and the emotions of love and gratitude to him, and delight and joy in him, shall increase unto all eternity.—*Judge Hale.*

THE PROPERTIES OF DIVINE GRACE.

DIVINE grace is the free favour, the undeserved compassion of Jehovah, through Jesus Christ, to the absolutely wretched; and includes the bestowment of all spiritual and eternal blessings. Its properties are sovereign, rich, and free; that is, sovereign, as it bestows its favours where and on whomsoever it pleases: rich, as being exceeding abundant in all manner of supplies, extended to the utmost necessities of the poor and wretched; and free, because not conferred upon the account of any inviting qualifications; not rewarding him that willet or runneth, but in all its bestowments wearing the pleasing appearance of reigning mercy. In short, grace confers the greatest blessings and highest favours, upon the most undeserving amongst the sons of men, according to the good pleasure of the Divine goodness.—*S. Ecking.*

LOVE OF TRUTH AND HOLINESS.

As for my part, this I say, and I say it with much integrity, I never yet took up religion by parties in a lump. I have found holiness where you would little think it, and so likewise truth; and I have learned this principle, which I hope I shall never lay down till I am swallowed up of immortality, which is, to acknowledge every good thing, and hold communion with it, in men, in churches, or wheresoever else.—*Dr. T. Goodwin.*



Eastern Robbers.

SCRIPTURE ILLUSTRATION.

"Lay not up for yourselves treasures upon earth, where moth and rust doth corrupt, and where thieves break through and steal."—Matt. vi. 19.
 "But know this, that if the good man of the house had known in what watch the thief would come, he would have watched, and would not have suffered his house to be broken up."—Matt. xxiv. 43.

THERE are some expressions in this caution given by our blessed Lord, which require a little explanation to an English reader. Our treasures are not liable to be injured by moths, nor to rust; for gold and silver are neither food for the former, nor are they assailed by the latter. But the treasures of the Easterns did not merely consist in silver and gold, but in a prodigious number of sumptuous and magnificent habits, which were regarded as a necessary and indispensable part of their treasures: hence, in the detail of a great man's wealth, the numerous and superb suits of apparel he possessed are sure to be recorded. Titus,

after the destruction of Jerusalem, besides gold and silver, distributed garments to those who had distinguished themselves by their valour. Now it will be easily understood, that the moth would destroy garments; and the word translated "rust," means to corrode, and treasures or ornaments of common metals, would suffer by corrosion.

In entering the premises by burglary, the Easterns do not break through doors or windows, for these are not easily accessible, but they make their way through the walls. The words "break through" and "broken up," properly mean to "dig through." The Eastern houses are not in general built like ours, of burnt bricks or stone, but of dried clay, like some of the cottages in the west of England; or if of bricks, they are merely hardened in the sun, but not burned; and it was the manner of house robbers to enter them by perforating the walls. It has

been particularly remarked, that the Arabians, Egyptians, and inhabitants of Damascus, still build of mud and slime, and unburnt brick, and that their walls are of great thickness.

The exhortation in the first text is a Hebrew manner of speaking, requiring us to relinquish things absolutely, which are only to be understood comparatively. It is, however, no credit to a Christian to hoard, though he may not do it to the extent of being denounced by the world as a miser. He must and will recollect that he is a steward for God, and that there are many ways in which he is called to exercise his stewardship, of which, liberality to the cause of God is not one of the least. The caution here may, however, relate to fixing the heart on the perishing treasures of this world. It shows a sordid mind, and that more care is taken about earth than heaven, "For," says our Lord, "where your treasure is, there will your heart be also." In the latter passage, the warning relates to the approaching and sudden destruction of Jerusalem, and to the coming of the Son of man to punish the rebellious and impenitent Jews in that awful visitation; while there may also be a further reference to the approach of death and judgment, which may overtake the ungodly silently and suddenly, robbing him of all on which his heart was set, and leaving him wretched and destitute through eternity.

J. C.

OLD HUMPHREY ON RUBBING OFF OLD SCORES.

It is astonishing how soon a room, altogether neglected, becomes covered with cobwebs; and it is equally remarkable how rapidly neglected duties accumulate, burdening the mind as much as the cobwebs disfigure the chamber. I have often in my youthful days marvelled when Michael Dobbs, our milkman, has announced his tally to be full. There it hung behind the kitchen door, newly washed, without a score upon it, but two chalks for two pennyworth of milk in a morning, and one and a half for three halfpenny worth at night, run up so quickly that, before we were aware of it, the board was full again, and a debt of four shillings and a penny for a single fortnight, had to be paid. "Let us rub off old scores, Mr. Humphrey, and begin again," Michael used to say on these

occasions; and often, since then, have I wished that my old scores on other accounts could be rubbed off, as easily as the chalk marks on Michael's milk board.

'Tis a bad plan to leave any part of a day's duties undone, for if it be difficult to do it to-day, it is not likely to be less so when the duties of to-morrow are added to it. He who cannot walk twenty miles in two days, will find it uphill work to trudge the same distance in one; and he who is too weak in the back to carry a burden of fifty pounds, will stoop terribly when a hundred-weight is placed on his shoulders. Now all this is too plain to be gainsayed; but the mischief of it is, that, though I find it comparatively easy to *talk* wisely, I find it very hard to *act* prudently. In spite of myself, and of the admonitions which from time to time I proffer to others, my old scores, every now and then, sadly accumulate, and I have need of the friendly whisperings of Michael Dobbs in my ears—"Let us rub off old scores, and begin again."

The reason why, at this particular time, I touch on the subject is, that there are some old scores of mine which I feel more than ordinarily anxious to rub off; and, looking up for assistance to Him, whose almighty aid can make the weak strong, and the unstable steady, I intend to accomplish my purpose. What these scores of mine may be, it is not altogether necessary to declare; enough that they are of a varied character. It seems to me to be a good opportunity to bring the subject before you, that if any of you should be similarly circumstanced, you may make an effort, at the same time, to effect the same purpose. "A word fitly spoken is like apples of gold in pictures of silver." If, therefore, you have any old scores, let us be working together; let us humbly, but ardently, enter on the necessary and profitable duty of rubbing them off and beginning again.

Some of my old scores refer to projects long ago formed, but never executed. A great number of important subjects are noted down on the papers beside me, to which, from time to time, I have intended to give my best attention; yet there they lie, day after day, and month after month, till I could almost sigh for the eyes of the fabled Argus, and the arms of the imaginary Briareus, to carry into effect the plans I have proposed to myself.

Happy is that man who can steadily discharge his daily duties, without mortgaging the energies of to-morrow! We may live beyond our income in regard to time, as well as to money, and he who has anticipated that of to-morrow, will suffer for it the next day, and the day after.

Here I have a bundle of ill-chosen subjects and ill-digested matter over which I have pored many an hour. It never has been, nor is ever likely to be of use to me or to any one else, though it has thrust aside inevitable duties which now I must imperatively perform. This is a score which, some how or other, must be rubbed off. There is another set of papers, and a large one, too, setting forth the outlines, the rough sketches of plans and projects of an exalted character. What high aspirations! what noble resolvings! what disinterested yearnings have made my heart throb, and my pulse beat! How vigorously have I undertaken, how tamely have I abandoned works of benevolence and utility! It does not signify, but Michael's motto must be mine. I must rub off old scores, and begin again.

Here is a pile of unanswered letters. No one values his friends more highly than I do, yet no one neglects them more, either in correspondence or personal communication. I must turn over a new leaf. I must diminish this pile; not a day, not an hour shall elapse before I begin to do what ought to have been done long ago. Here is a letter of a particular character. It begins with the affectionate greeting, "Dear Old Humphrey," and informs me that at the house of a Dorsetshire friend, I have been spoken of with much kindness; and the announcement of this fact, my correspondent thinks well to accompany with a little sage advice, lest I should allow it to elate me; he knows that a trifling thing will puff up an old man's heart.

I will copy one part of the letter, lest, by putting it into my own poor language, it should be robbed of half its interest: "After a little chat, the party walked into the garden, where, among other things to be admired, were several bee-hives, the produce of which had been consecrated to the Bible Society. In the centre of a little lawn, facing the back parlour window, and under the shade of an apple tree, there was another bee-hive on the new plan—all the inmates can be seen busily at work, and the honey can

be removed without destroying them. One of the party suggested that, as Old Humphrey was a great favourite, the produce of that hive should be given to the Tract Society, which published Old Humphrey's papers. This was agreed to, provided the master of the house, on reflection, was convinced that this particular hive did not form part of the property given to the Bible cause."

Now this letter is one of my old scores: let me hasten, then, to rub it off, by acknowledging the kindness it makes known to me. I thank you, my unknown friends, for your favourable opinion; but I speak truly in saying that it rather humbles than exalts me. Much more reason has Old Humphrey to lament on account of what he is not, than to exult on account of what he is.

To be a hewer of wood or a drawer of water in aiding any institution in doing good, ought to give me, and I trust it ever will give me, heartfelt satisfaction. A reasonable ground of belief that I had ever, in any degree, strengthened the hands of that highly honoured institution, the Religious Tract Society, would be oil to my joints, and marrow to my bones.

Again, I thank you for your kindness manifested in the most agreeable way, by your willingness to support Christian institutions, which, with God's blessing, will increase when we are gone; spreading far and wide unnumbered blessings in the earth, when the hillock that covers Old Humphrey will be undistinguishable.

Sweet as honey is, a bad use may be made of it. I have somewhere read of a famous general of olden time, who came at the head of his invincible troops to a wood abounding with honey, when the eating of the tempting sweet too freely, rendered his soldiers luxurious and effeminate. Soon after this, being repulsed with great slaughter, he exclaimed, "It is the honey, and not the enemy, that has conquered me."

You do well to put out your bee-hives to interest, to make known with them more extensively the statutes, the judgments, and commandments of the Lord: for "more to be desired are they than gold, yea, than much fine gold; sweeter also than honey and the honeycomb." I take it for granted, that while the bees of your old hive are acting so distinguished a part, you will not allow their offspring to be less honourably occupied.

Every fresh swarm from the hive will, it is hoped, doubtless form an infant colony, devoted to the same good work.

I wish you could prevail on your neighbours who have hives, to adopt the same course; to "go and do likewise."

What think you of this subject of old scores? have you nothing of the kind that now and then comes across your spirit like a cloud? have you rubbed off lately, and begun again, or is the tally full? Let us have no shuffling, but meet the question like a man. Are you sure that you have no old scores to remove? no acts of unkindness to your fellow-beings? no coldness, nor quarrels, nor heartburnings? no parsimonious grudgings, nor thoughtless extravagance, no committed errors, nor omitted duties? have you done nothing that ought to be undone, nor left undone what ought to be performed?

Have you kept steadily to the strait but narrow way that leads to Zion? or have you wandered in the broad path that leads to destruction? Are you, without the least reservation, looking to the Saviour of sinners for salvation, or are you faltering in your faith, and partly turning your back upon the cross of Christ? Are you rejoicing with the fatted calf before you, in the house of your heavenly Father, or eating husks in the company of swine? Are you now saying, "As for me and my house, we will serve the Lord;" or are you ready to halt in your Christian course?

Come! come! I see that you begin to quail, and I won't press you too closely. He that narrowly scrutinizes his own heart, will be sure to know something about what is going on in the bosom of his neighbour. Your case may not be so bad as mine, my tally may be fuller than yours, and yet you may have old scores, quite enough to bring a cloud on your brow. Let us, then, as I said before, be always looking upwards for help to Him that is mighty; and then humbly, but ardently, enter on the necessary and profitable duty of rubbing off old scores and beginning again.

WILBERFORCE'S "PRACTICAL CHRISTIANITY."

AMONGST the works constantly issuing from the press, one may sometimes be discovered of no ordinary interest; whe-

ther regard be had to its intrinsic worth, or to the effect produced by its perusal. Such was the volume entitled, "A Practical View of Christianity," by the late Mr. Wilberforce; a few particulars of which will now be given.

It was published on the 12th of April, 1797; and, according to his biographers, "many were those who anxiously watched the issue." Dr. Milner had strongly discouraged his attempt. "A person who stands so high for talent," wrote David Scott, "must risk much, in point of fame, at least, by publishing upon a subject on which there have been the greatest exertions of the greatest genius." His publisher was not devoid of apprehensions as to the safety of his own speculation. There was then little demand for religious publications, and "he evidently regarded me," says Mr. W., "as an amiable enthusiast." "You mean to put your name to the work? Then I think we may venture upon five hundred copies," was Mr. Cadell's conclusion. Within a few days, it was out of print, and within half a year, five editions (seven thousand five hundred copies) had been called for. His friends were delighted with the execution of the work, as well as with its reception.

"I heartily thank you for your book," wrote Lord Muncaster. "As a friend, I thank you for it; as a man, I doubly thank you; but as a member of the Christian world, I render you all gratitude and acknowledgment. I thought I knew you well; but I know you better now, my dearest, excellent Wilberforce."

"I see no reason," said his friend James Gordon, "why you should wish to have given it another year's consideration; the world would only have been so much the worse by one year."

"I send you herewith," Mr. Henry Thornton writes to Mr. Macauley, "the book on religion lately published by Mr. Wilberforce; it excites even more attention than you would have supposed, amongst all the graver and better-disposed people. The bishops, in general, much approve of it; though some more warmly, some more coolly.—Many of his gay and political friends admire and approve of it; though some do but dip into it. Several have recognised the likeness of themselves."

"I am truly thankful to Providence," wrote Bishop Porteus, "that a work of this nature has made its appearance at

this tremendous moment. I shall offer up my fervent prayers to God, that it may have a powerful and extensive influence on the hearts of men; and, in the first place, on my own, which is already humbled, and will, I trust, in time be sufficiently awakened by it."

"I deem it," said the Rev. J. Newton, "the most valuable and important publication of the present age, especially as it is yours." To Mr. Grant he wrote, "What a phenomenon has Mr. Wilberforce sent abroad! Such a book, by such a man, and at such a time! A book which must and will be read by persons in the higher circles, who are quite inaccessible to us little folk, who will neither hear what we can say, nor read what we may write. I am filled with wonder and with hope. I accept it as a token for good; yea, as the brightest token I can discern in this dark and perilous day. Yes, I trust that the Lord, by raising up such an incontestable witness to the truth and power of the gospel, has a gracious purpose to honour him as an instrument of reviving and strengthening the sense of real religion where it already is, and of communicating it where it is not."

A striking instance of the usefulness of this work, appears in the Memoirs of the Rev. Legh Richmond. It is stated by his biographer, that about two years after he had entered on his curacies, one of his college friends was on the eve of taking holy orders, to whom a near relative had sent Mr. Wilberforce's *Practical Christianity*. This thoughtless candidate for the momentous charge of the Christian ministry, forwarded the book to Mr. Richmond, requesting him to give it a perusal, and to inform him what he must say respecting its contents. In compliance with this request, he began to read the book, and found himself so deeply interested in its contents, that the volume was not laid down before the perusal of it was completed. The night was spent in reading and reflecting upon the important truths contained in this valuable and impressive work. In the course of his employment, the soul of the reader was penetrated to its inmost recesses; and the effect produced by the book of God, in innumerable instances, was in this case accomplished by means of a human composition. From that period, his mind received a powerful impulse, and was no longer able to rest

under its former impressions. A change was effected in his views of Divine truth, as decided as it was influential.

It is gratifying to add, that not a year passed during the after life of Mr. Wilberforce, in which he did not receive fresh testimonies to the blessed effects which it pleased God to produce through his publication. In acknowledging this goodness of his God, the outpourings of his heart are warm and frequent; though the particular occasions are too sacred to be publicly divulged.

Men of the first rank and highest intellect, clergy and laity, traced to it their serious impressions of religion, and tendered their several acknowledgments in various ways, from the anonymous correspondent, "who had purchased a small freehold in Yorkshire, that by his vote he might offer him a slight tribute of respect," down to the grateful message of the expiring Burke. That great man was said by Mr. Windham, in the House of Commons, when he had arranged his worldly matters, to have amused his dying hours with the writings of Addison. He might have added what serious minds would have gladly heard:—"Have you been told," Mr. Henry Thornton asks Mrs. Hannah More, "that Burke spent much of the two last days of his life in reading Wilberforce's book, and said that he derived much comfort from it, and that if he lived he should thank Wilberforce for having sent such a book into the world? So says Mr. Crewe, who was with Burke at the time." Before his death, Mr. Burke summoned Dr. Laurence to his side, and committed specially to him the expression of these thanks.

The effect of this work can scarcely be overrated. Its circulation was at that time altogether without precedent. In 1826, fifteen editions (and some very large impressions) had issued from the press in England. "In India," says Henry Martyn, in 1807, "Wilberforce is eagerly read." In America, the work was immediately reprinted, and within the same period twenty-five editions had been sold. It was added to the list of the publications of the Religious Tract Society, in December, 1833; since which time more than fifteen thousand copies, of which many were expressly for the higher classes, have been circulated through the Society, in addition to

several editions printed by the book-sellers. It has been translated into the French, Italian, Spanish, Dutch, and German languages. Its influence was proportionate to its diffusion. "It may be affirmed, beyond all question," his biographers observe, "that it gave the first general impulse to that warmer and more earnest spring of piety which, amongst all its many evils, has happily distinguished the last half century."

MOLLUSCA. No. I.
Their Structure.

"ALL thy works," says the psalmist, "praise thee, O God." Every part of them, even the minutest, will amply repay the attention they excite. We shall find a rich reward in studying the little flower which springs up from the heath, as well as the elm, the oak, or the cedar; nor will any exception arise, if we turn from the elephant, the giraffe, or

The fish, that with their fins and shining scales,
Glide under the green wave,

to the large, remarkable, yet still little considered family, now to be introduced to our readers.

The term mollusca denotes an assemblage of beings, which was first noticed as constituting one of the primary divisions of the animal kingdom, by Cuvier. In this extensive class are comprehended a vast multitude of species. In all, as their name (derived from the Latin word *mollis*, soft) imports, the body wants that hardness of substance which is so common to living creatures. It is inclosed more or less completely in a muscular envelope, called the *mantle*, composed of a layer of contractile fibres, which are interwoven with the soft and elastic integument. This part of the animal, however, is often narrowed into a simple disk, formed into a pipe, hollowed into a sac, or extended and divided in the form of fins.

As the organization of the mollusca is not fitted for the construction of an internal skeleton, a benevolent provision is made for them in the formation of hard calcareous coverings, or shells, the result of a peculiar process of animal production. Some have internal shells, for the support and defence of particular organs; and others have shells partly internal and partly external. They are exceedingly various in shape, colour, and appearance, yet all composed of the same kind of material; and their production

and increase are regulated by the same uniform laws.

The mouths of each species of mollusca, like all their other organs, are fully adapted to their respective circumstances. Some need only a little opening to admit the animalcules borne to them by the waters; and this, therefore, we observe: those which subsist on vegetable productions have mouths provided with jaws, which are horny, or furnished with teeth: such as are carnivorous, have commonly a fleshy pliable tube, with a round opening at the end, edged by a strong substance, and armed with little teeth,—a tube which can be protruded or drawn in at pleasure. Various means are also possessed for bringing their food to the mouth; sometimes this proboscis is stretched out, and at others it pierces the shells of other mollusca, that the creature may suck out the flesh of the inhabitants. They are, moreover, provided with tentacula, a word derived from the Latin *tentare*, to try or feel, denoting parts which act like those projections of the snail, called horns, with which the little animal tries and feels about; they vary in number, and have muscles and nerves.

Some mollusca have the power of locomotion. Snails, as is well known, move along the ground; for a fleshy expansion under their bodies is full of muscles, which are dilated or contracted at pleasure. This adheres, like the sucker which the school-boy (little aware often of the philosophy of the act) fastens to a stone, by the pressure of the atmosphere above, after its removal from beneath; and thus the creature advances, by fixing the fore part to the ground, and drawing the remainder after it.

Excepting a few, however, among the higher orders of these creatures, the mollusca are but imperfectly prepared to move from place to place. With a due consideration of the wisdom of God, the reason will be immediately obvious; such a power to its full extent is not wanted. The greater number, indeed, are intended to be completely stationary. The oyster, the muscle, and the limpet, for instance, usually adhere to rocks at the bottom of the sea, and are consequently nourished by the food casually brought within their reach by the waves and currents of the ocean, in which they exist. But even here we find an illustration of the saying, "To all things

there is a time." For this attachment to the solid body on which they fix their permanent abode, does not take place till they have reached a certain period of their growth. As immediately after they begin to live, they are free to move in the water, they roam abroad in quest of a habitation; and hence we discover a power of selection even in creatures of so humble an order, which doubtless settles on circumstances the most favourable to the condition of the animal. An analogy appears here to those of other creatures, which are locomotive only in the early stages of their existence; and both classes bear to us the intimation,

"The hand that made us is Divine."

Of this some interesting illustrations will be afforded by the next paper.

"IF NOTHING HAPPENS TO PREVENT."

AN expression very simple in itself, sometimes makes a deep and powerful impression on the mind. Passing through one of our squares, I came up to two young women engaged in conversation. They stepped aside from the pavement on the approach of a passenger, and were probably making some appointments previous to taking leave of each other. As I passed, the words reached my ear, "If nothing happens to prevent;" and the young women pursued their respective courses. I knew nothing of them, or of their plans and engagements, but the expression lodged in my mind, and gave rise to a train of reflections, something like the following.

I was first reminded of the uncertainty of all human schemes and prospects. This even the most thoughtless must admit. Perhaps the young women had been making some important, or perhaps, some trivial arrangement. It might be a distant journey to which they alluded; a change of residence; entering on a new employment; forming a connexion for life: or it might be merely an appointment for a morning's walk, or an evening tea party, or an hour's recreation; but whatever it was, the consciousness was expressed that something might happen to prevent—

"Mr. —," says one person, "I am surprised to meet you; you told me you were to set off on your journey to-day." "Yes, but I was prevented, the coach was full;" or, "the

coach has ceased to run;" or, "I received a letter from my friends to defer my visit;" or, "the vessel sailed at an earlier hour than I was aware of, and I was left behind, and my friends who came to meet me were disappointed;" or, "the unfavourable weather induced me to alter my plan."

A friend of mine had engaged a young woman as nursery governess, and anticipated happy results in her family, from committing her children to the care of one so well recommended for discretion, piety, amiable manners, and general competence for her undertaking. The children had been encouraged to look forward to her arrival with pleasure; the appointed day arrived; but, instead of the expected stranger, a letter came, announcing that she was seized with alarming illness, and consequently prevented fulfilling her engagements.

Another young female was engaged to attend on an elderly lady. Her clothes were packed up; she had taken leave of her friends, and was just about to take her departure, when a messenger came to inform her that the old lady had died that morning, and that consequently her services were not required.

A young clergyman from a distant county, came to our city to be united in marriage with an amiable young lady, to whom he had long been attached. The day was fixed; the dresses were purchased, and every preparation was made for celebrating the wedding. But on his arrival at the house of the lady, he was alarmed at the litter spread over the road, and the muffled knocker, which indicated that illness had entered the dwelling; with trembling steps he advanced, and inquired what was the matter; and with agonized feelings he learned that the object of his affection had been seized with a brain fever, and that her life was despaired of. He approached her bed-side, but she knew him not; and his most tender and soothing assiduities were met only by vacant insensibility or the ravings of delirium. A few hours closed the mournful scene, and on the day that he expected to lead a blooming bride to the altar, he followed her remains to the silent tomb.

"I shall see you at the dinner table; we dine at three; be punctual, or I shall not wait for you," said the mistress of a family to an invited guest, and withdrew to her chamber to prepare for receiving her company. A longer time than usual

had elapsed; the hour of dinner arrived, and the lady did not make her appearance; the servants became alarmed, and knocked at her chamber door; no answer was returned: they opened it, and she was found dead at her toilet.

A zealous young minister, accompanied by a friend, went, according to appointment, to meet some other friends in a neighbouring town, to concert measures for introducing the blessings of evangelical instruction into a dark and wretched hamlet. His heart was full of schemes for the good of his fellow-creatures, and these he communicated to his friend as they rode along. "Now," said he, "there is one thing very much on my mind, which I do hope to be permitted to accomplish, and that very shortly: as soon as we reach the bottom of the hill, I will tell you all about it." But no sooner had he spoken these words, than some part of the harness breaking, the horse took fright, the chaise was overturned, the minister received a violent contusion on the head, and never spoke more.

A public holiday afforded to some young men, engaged in regular work, the opportunity of recreation. They formed their plans with much glee, and anticipated a pleasant excursion on the water for the day, and a social tea party on their return in the evening. They wrote to another young friend, inviting him to meet them, and closing with the assurance that they should certainly be at home by six o'clock. And so they were,—but not as they expected. Only a few minutes after they started in the morning, a squall of wind upset their little sailing boat, and three of the party were drowned.

Instances might be multiplied to any extent, but it is unnecessary. Every one knows and feels that all his purposes and schemes bear the stamp of uncertainty. They should, therefore, have the proviso, "If nothing happens to prevent." "Go to, now, ye that say, To-day or to-morrow we will go into such a city, and continue there a year, and buy and sell, and get gain. For what is your life? It is even a vapour that appeareth for a little time, and then vanisheth away," James iv. 13, 14. "Boast not thyself of to-morrow, for thou knowest not what a day may bring forth," Prov. xxvii. 1.

2. I was next reminded of our constant dependence on the will of God. These interruptions of our worldly schemes and expectations do not "spring out of the dust," or result either from chance or ne-

cessity. But "the Lord is Governor among the nations:" "He hath done whatsoever he pleased in the army of heaven, and among the inhabitants of the earth:" "He lifteth up one, and setteth down another." "Unto God the Lord belong the issues from death." "Shall there be evil in a city, and the Lord hath not done it?" He turneth man from his purpose, to hide pride from man; He overrules the falling of an empire, and the flight of a sparrow; and the very hairs of our head are all numbered. "The way of man is not in himself; it is not in man that walketh to direct his steps;" "man's heart deviseth his way: but the Lord directeth his steps." How important is it that we should habitually and seriously recognise and realize this dependence, and connect with all our purposes and anticipations, the proviso, "If the Lord will, we shall live, and do this, or that."

I know not whether the young woman whose incidental remark gave rise to these reflections, had any reference, when she uttered the expression, to the Divine permission or prevention of her purpose. Worldly men in general form their plans and projects as if they had the absolute control of events; whereas they "cannot make one hair white or black;" and "God is not in all their thoughts." But surely it becomes us as Christians, to refer all our purposes to the will of God, and in every thing to seek his direction and blessing, and submissively to acquiesce in his dispensations. Such a disposition of mind would have a most happy influence both on our purposes and actions. It would preserve us from forming any unlawful project, and it would teach us to do nothing on which we could not implore the Divine inspection and blessing. "I have set the Lord always before me; because he is at my right hand, I shall not be moved."

3. I was then led to reflect on the expression, "If nothing happens to prevent," as an illustration of the folly and sin of procrastination in those matters to which it is our duty to attend. "Whosoever thy hand findeth to do, do it with thy might," lest "anything should happen to prevent." Too often the "something that prevents" the accomplishment of our good intentions, is but the creature of our own imagination or indolence. "The slothful man saith, There is a lion in the way."

"This is the last day for the payment of the Fire Insurance," said a father to his son-in-law and partner in business, as they sat at the breakfast-table: "will you call this morning, and pay it?" "Yes, sir," replied the young man. At dinner time the matter was again mentioned. "Is it done?" inquired the old gentleman. "No, sir," replied the younger; "I have been called another way this morning, but this afternoon I am going by, and will not fail to do it." He set off with that intention; but, meeting with a friend, was persuaded to accompany him to his house, and did not leave until the Insurance Office had closed. "Ah, well," he said, "it does not signify for one day; and I will make a point of doing it the first thing in the morning, before the old gentleman has an opportunity of asking me about it." But that very night an alarm of fire was heard; and before morning the premises were entirely consumed. The property, after having been insured for thirty years, was uninsured at the moment of its destruction; and two families were plunged from comfort into destitution.

"My dear William, have you written to your mother?" said Mrs. S. to her husband; "you know she expressed an earnest desire that you would answer her letter immediately, as she was anxious to hear of our welfare; and now her health is so feeble, I am sure she ought to be spared all needless anxiety on our account." "No, I have been prevented hitherto; but I intend writing to-morrow." "And will you not inclose a little present for the dear old lady; she may be in want of some little comforts this severe weather?" "Yes, my dear; I thank you for mentioning it: we can spare five pounds, which I have no doubt will be acceptable." "But had you not better send to-day? why wait till to-morrow? something may happen to prevent; or if you are too busy to write to-day, shall I write for you?" "No; I wish to write myself: to-morrow will be quite time enough." To-morrow came; but something or other occupied the day, and the letter was not written till it was too late for the post. The third day from the daughter-in-law's affectionate suggestion, the letter and its inclosure were sent. It was a two days' post: one day earlier than an acknowledgment of its receipt could be expected, a letter bearing the usual post-

mark was received; but the direction was not in the mother's hand-writing. With some trepidation it was opened, and was found to announce her death. She had, as usual, suffered exceedingly from the cold weather, become rapidly worse, and sunk after a struggle of a few hours. Her son, in addition to the ordinary feelings of grief for the loss of a parent, had through life to endure the bitter feelings of self-reproach, for not immediately attending to the first suggestions of duty. It was probable that had he done so, some needed comfort which his communication would have afforded, might have alleviated her sufferings, if not have averted the fatal issue; at least her mind would have been soothed with the expression of dutiful affection from one so dear.

"I will hear thee again," said the dissolute, awakened, and trembling magistrate, to the preacher of "righteousness, temperance, and judgment to come:" but he waited for "a more convenient season;" and something always happened to prevent. There was some feeling to be spared; some worldly interest to be pursued; some vice to be indulged; and, in all probability, Felix died, as he had lived, a slave to his sins, and an enemy of God.

"Next Sunday I will certainly go on differently," said a poor railway labourer, when remonstrated with by a pious work-fellow for spending the sacred day in a public-house in sloth and intemperance. "I will clean myself in the morning, and go with you to hear your minister—if nothing happens to prevent." But, alas! something did happen to prevent. Before the close of the week, a vast mass of earth fell in and buried this poor man and several others, in instant destruction.

And are there not many who constantly hear the gospel, and know the way of salvation, and yet have gone on day after day, and year after year, yielding to one or other of the ten thousand hinderances continually presented by Satan to prevent men from actually coming to Christ, that they may be saved? While perfectly conscious that this is the case with them, they still go on satisfying themselves with the general conviction that they *must* come and *may* come, and the general intention that they *will* come; but something happens to prevent: until they close a life of neglected privileges with the bitter exclamation,

"The harvest is past, the summer is ended, and we are not saved."

4. "If nothing happens to prevent."—If such is the motto of uncertainty indelibly inscribed on the future, how much is it the part of wisdom to seek our happiness in *present* duties and enjoyments! Worldly men pursue their happiness in the promises they make to themselves beforehand. Their heads are full of fine visions of what they shall be, and do, and enjoy at some future time, though they can neither be sure of time, nor of any of the advantages they promise themselves. Thus, while their minds are engrossed in the pursuit of a visionary futurity, the realities of the present are overlooked. From the seeds of vain expectations they are continually reaping an abundant harvest of bitter disappointment; and, at length, death surprises them when they are just about to begin to live.

Even in the conduct of the Christian there is too great a resemblance to this false estimate and mode of calculation; and both time and resources are far too much expended on preparation for the uncertain future, rather than in the diligent discharge of present duty, and the wise improvement of present advantages. The principle is erroneous, because it is not carried far enough. Did our anticipations of futurity always, as they should, bear us on to eternity, they would be ennobled, sanctified, and realized. We should take the position of the servant waiting for his Lord's return, meanwhile diligently employed in the humble duties of his station; and "blessed is that servant whom his Lord, when he cometh, shall find so doing." But when our schemes and anticipations are bounded by earth and time, the more extended and distant their range, the more they will tend to take us off both from present duty and present enjoyment. He well knew the bias of the human heart, and the influence of temporal anticipations, (whether of a pleasing or a painful kind,) and the right road to happiness, who said to his followers, "Take no thought for the morrow: for the morrow shall take thought for the things of itself. Sufficient unto the day is the evil thereof." The happy man is he who lives in the fear of the Lord all the day long, discharging the duty of every day in its day, and leaving the morrow in the wise and gracious hands of his heavenly Father, who knows what things

he has need of, and has given him the comprehensive assurance, "As thy days, so shall thy strength be. I will never leave thee, nor forsake thee."

I was further struck with the vast importance of habitual preparation for the great events which nothing can prevent, but which may prevent every other anticipation and pursuit. If we enjoy the blessedness of being ready for death and judgment, we are certainly prepared for whatever we may have to meet with before they come: if not, how can we dare to form a project, or enter into an engagement, whether trifling or important, of which we must say, "if nothing happens to prevent," when the something that prevents it may be that which shall plunge us in everlasting ruin and despair? Surely we should seek first the kingdom of God and his righteousness, satisfied that then all other things will be added thereunto. Whatever becomes of other things, our first wisdom is to be ready, since we know not the day nor the hour when the Son of man may come.

One thought more. I was reminded of the happiness of having our plans and purposes in accordance with those of God. This is the only, and it is an effectual way, to avoid disappointment:—"Delight thyself in the Lord; and he shall give thee the desires of thine heart." "All the paths of the Lord are mercy and truth unto such as keep his covenant and his testimonies." All things may not turn out according to our expectations and desires; but "all things work together for good to them that love God, to them who are the called according to his purpose." If we refer the choice of our inheritance to God, though it may not be the same, it will be a better than we should have chosen for ourselves. "If God does not by his providence give us what we desire, yet if by his grace he makes us content without it, it is much the same. Let it suffice thee to have God for thy Father and heaven for thy portion, though thou hast not every thing thou wouldest have in this world. Be satisfied with this, God is all-sufficient." If we are one with Christ, whatever disappointments we may meet with in little things, we shall never meet with a disappointment in the great one: for he gives unto his sheep eternal life, and they shall never perish, neither shall any pluck them out of his hands. As the children of God, "it is

our Father's good pleasure to give us the kingdom." And while it is an inheritance incorruptible, undefiled, and that fadeth not away, it is reserved in heaven for us, who are begotten again to a lively hope by the resurrection of Christ from the dead, we are kept by the mighty power of God through faith unto salvation, ready to be revealed at the last day.

C.

ATMOSPHERIC ELECTRICITY.

SINCE Franklin proved that thunder and lightning were effects of atmospheric electricity, produced by the discharge of the fluid in an accumulated state, philosophers have been anxious to extend their acquaintance with the origin of atmospheric appearances. There can be little doubt, that free electricity may always be detected in the atmosphere; sometimes having a positive, and at others a negative character. Every substance has its natural quantity of electricity; but by rubbing, and other operations it may be diminished or increased.

The disturbed electric state of the atmosphere may be, and is, probably, the cause of many meteorological phenomena. Theories have been invented to account for the formation of clouds, rain, snow, and hail, but none of them can explain all the appearances attending these common phenomena. The principle adopted in some of these theories may be true, but the manner in which it is modified by electricity is not known. There is abundant evidence to prove that some clouds are charged with electricity, and there are many reasons for the supposition that all clouds are formed by the aid of the same agent.

Clouds consist of a vast number of small bubbles, and these, though so combined as to form a mass, repel each other. A traveller states, that he was once on a mountain, and saw a cloud pass before him, and it consisted of bubbles thus united, and yet each seemed to repel every other.

It is not, however, our present intention to trace the effect of atmospherical electricity in producing the various changes in the weather, and the modifications of clouds, but to explain some of the means by which scientific men have endeavoured to determine the electrical condition of the atmosphere.

Of the attempts made by the early electricians we shall speak briefly, as our

principal wish is to describe the complete arrangements adopted by Mr. Cross, a gentleman who is well known to the public for his experiments on crystallization by voltaic electricity.

When Franklin had been deeply impressed by the curious analogy between the effects of common electricity and lightning, and wished to determine by experiment the nature of the agents producing lightning, he raised a kite into the clouds. A plaything was thus made the instrument for determining the character of one of the most terrible agents in nature. Half ashamed of the simplicity and apparent meanness of his apparatus, and fearing the ridicule of his neighbours and friends, he took with him his son to assist in the performance of an experiment, sufficient in itself to enrol his name among the most celebrated philosophers. The kite used by Franklin, differed but little from that made by boys. The lath in the boy's kite was in his a metallic rod terminating in a point; and the string connecting it with the earth was attached to electrical apparatus. The kite was raised when a thunder cloud was passing over the spot on which he stood, and Franklin expected that if electricity were the cause of lightning, the fluid would pass down the thread, and give evidence of its presence by sparks, charging leyden-jars, and by other effects. For some time no effect was produced, and he began to fear that his anticipations would not be realized. But a shower of rain fell, and wetting his string, made it a better conductor; the fluid instantly followed; sparks were obtained, and the certainty of its being the same agent as that collected from the electrical machine was established.

Franklin then proceeded to apply his discovery, and invented the lightning conductor, which is a metallic rod terminating in a point, and attached to the side of a house. To his lightning conductor he affixed an apparatus, consisting of a bell and clapper, and being thus forewarned, by the ringing of the bell, of the approach of a thunder-storm, he was able to perform such experiments as he required.

The many distressing accidents caused by thunder-storms, have induced persons to apply lightning conductors to buildings, under the hope of protecting them from the terrible results which

usually follow when they are struck ; or, in other words, when the electricity passes through them.

It may here be worthy of remark, that when the conductors are improperly made and fixed, they are more likely to be the causes of danger than preventives. We know that their construction is often left to persons who are quite ignorant of the science of electricity, and think it sufficient if a metallic rod of some sort be only fixed upright against the building. To explain the errors into which such persons fall is not necessary ; we will describe the method in which the conductor ought to be made and fixed. An iron or copper rod), the latter is not subject to rust, and should be preferred, though more expensive,) is fixed against the end of the building it is intended to protect, and rising to the height of two or three feet above the loftiest part of the structure, terminates in a point. The rod is fixed higher than any portion of the building, because if a stream of electricity should take the direction in which the house stands, it ought at once to be drawn towards the conductor. On the other hand, care must be taken not to raise the rod to such a height as to draw the electricity from the clouds ; this may be easily done, and then danger is incurred rather than prevented. The use of the point is to conduct the electricity away quietly. When accumulated electricity passes from any charged substance to a knob, a loud snapping noise is produced, and a great force is required, before the charge can be communicated ; but when the fluid is under the influence of a point, it is carried away without noise, and in a continued stream. The rod itself should never be less than three quarters of an inch in diameter.

The proper termination of the other end of the conductor is equally important. It is scarcely necessary to say, that the rod must be unbroken ; for every one who pretends to erect one of these must be aware, that if it should be disunited at any point, the fluid will have to pass through a bad conductor, and may either fly to the lower part of the conductor, or to some piece of metal used in the construction of the building ; in the latter case causing, in all probability, much damage, and perhaps destroying the lives of those who may happen to be at the time within it.

Many persons believe it sufficient to carry the rod a few feet below the surface of the ground, and imagine that the electricity is then sure to be safely conducted away. The slightest reflection upon the violence and terrible power of the agent would be sufficient to correct this error. We know that a few feet of tin foil will contain a charge sufficient to break strong bottles, tear asunder blocks of wood, and produce other mechanical effects. What then must be the result, when thousands of acres of cloud form the electrified surface ? A short time since, a field in Scotland was struck by lightning, and it was ploughed up from one end to the other, in deep furrows, having no direct means of escape, and many sheep and cattle were killed. To avoid such a result as this, the end of the conductor should be in metallic contact with a body of water ; such as a deep pond, or a well : danger will then be avoided.

Since the time of Franklin, many instruments have been invented to test the presence of electricity in the atmosphere, and its nature. None of these are so well suited to the purpose as might be expected from the present state of electrical science, and the progress of meteorology as a study has consequently been retarded. Some recent attempts have been made to supply this deficiency, but as the accuracy of the instruments is still a matter of doubt, we will neither describe them, nor venture an opinion concerning them.

MR. CROSS'S APPARATUS FOR ATMOSPHERIC ELECTRICITY.

"Franklin's kite," says Mr. Cross, in an unpublished paper, "was well adapted to the proving the identity of natural and artificial electricity ; but an apparatus calculated to render sensible not merely the larger occasional collections of this fluid, but to exhibit, at all times, both day and night, the almost infinite variety of changes, both as respected their quality and quantity, which the atmosphere teems with, requires all the foresight and ingenuity which a man may possess ; on the one hand, to avert the destructive effects which would result from a wrong direction of a stroke of lightning ; and, on the other hand, to keep up a perfect insulation of the exploring wire ; more especially during a driving rain and

fogs, and likewise under a heavy fall of snow. Great strength is also required to support the very great strain of the wire, as well as to resist the attacks of large birds who fly unconsciously against it in the dusk; and to bear the numerous swallows who sport upon it in the day. The easiest possible mode of raising and lowering the wire must be resorted to, as well to repair any accidental fracture, as to clear the insulators from spiders' webs, and other insects which destroy the insulation by filling up the insulated space."

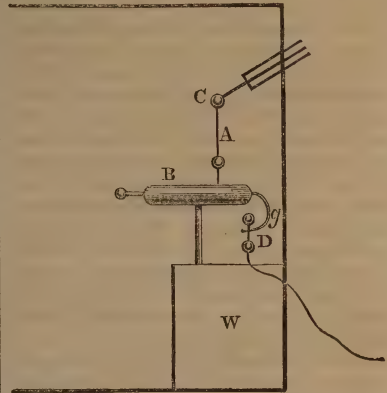
The exploring wire of which Mr. Cross here speaks, was one-sixteenth of an inch in thickness, and was carried through his grounds, over valleys one hundred and fifty feet deep, ponds, woods, and buildings. This wire was supported by large masts completely rigged like those belonging to a vessel, and were from fifty to one hundred and ten feet in height; and were raised to their places by a pulley. A violent hurricane, however, destroyed in one night nearly all the masts, although each contained two tons of timber. After this accident, Mr. Cross shortened the length of the wire to eighteen hundred feet, "which," he says, "I was successful enough to keep strained without once breaking, and sufficiently insulated to show at all times the electricity of the atmosphere during a period of eighteen months. The whole of this time I regularly examined the electricity of the atmosphere, both day and night, and have learned, perhaps, all that can be learned, from these observations, in the present state of the science."

The masts were afterwards made about fifty feet in height, and were fixed by iron rings, to stout trees. The rings on each tree were about ten feet apart, and through them the mast passed, resting on a stone on the ground. "If the tree be lofty and sufficiently strong, a shorter pole may be elevated in the nature of a top-mast, passing through similar rings attached to the upper part of the tree. The bottom of the pole instead of resting on the ground may be secured by an iron pin passing through it just above the lower ring."

In another part of his description, Mr. Cross says, "The poles are all attached to trees, and in some instances I make use of the upper part of the tree

itself; length of wire being of more importance than height of elevation. But whatever may be the number of poles employed, they must stand so as to form an angle with each other, and not in a straight line, unless you make use of only two."

From this account it will be evident, that Mr. Cross collects atmospheric electricity by wires stretched between poles at short distances from each other.



Connected with the exploring wire there is a cross wire, which enters a room devoted to experiments, through a glass tube, as represented at the top of the diagram, and is fixed into a pane of wood, which is substituted for one of glass. From the ball c, the electricity is conveyed by a wire, A, covered with sealing-wax, to a conductor B. This conductor is similar to that used with the electrical machine, and is supported on a glass pillar, for insulation, standing on a window-seat or table, w. To one end of the conductor is attached an instrument, called Lane's Electrometer, D, which consists of two brass balls connected with the conductor, by a glass rod, g. To the lower ball of the electrometer, a wire is fixed, which is carried to a stream of water two hundred yards distant, and is secured from injury by being buried in the ground. By adopting this arrangement, "you may," says Mr. Cross, "sit securely, smile at the passing storm, and analyze while you smile. Almost every experiment which has been performed at the prime conductor of an electrical machine, have I performed with atmospherical conduc-

tors,—melted wires, charged batteries, decomposed fluids, etc. I have, however, been sometimes put to flight, by an explosive stream of fluid sufficient to charge the largest battery by contact, and continuing for hours constantly changing from positive to negative, or the reverse. The terrific sound, rattling of windows, etc., accompanying this, has been awful beyond description. My funnels have been scorched, and the cement partially melted, but no accident has yet happened.”

To close this paper, we will extract one other passage from Mr. Cross's letter, in which he gives his opinion of the nature of a thunder-cloud:—"What is called a thunder-cloud, seems to me to be far from a mass of vapours electrified equally throughout its extent; but to consist of regular concentric circles, alternately positive and negative, having its centre electrified with the contrary electricity to its circumference or edges. The electricity residing in the edge of the cloud is invariably weaker than that in the centre, which is diametrically opposite to the state of a charged insulated plate of metal, or more perfect conductor, in which the fluid is equally diffused as to its quality, but in which the greater quantity is condensed at the circumference. I have known one of these clouds to alter the electricity of the wire eighteen times in three minutes, invariably increasing in power till the centre of the cloud has passed over the wire, and invariably decreasing afterwards."

IMPERIAL RESIDENCE IN CHINA.

As a proof of the civilization of the Chinese, we may mention the state maintained by the emperor, who dwells in the interior of his splendid palace, secluded from the gaze of the populace, and surrounded by extensive parks and gardens; with the solemn parade of ministers, and the pompous pageantry of processions; which bespeak indeed a sort of barbaric grandeur, but a grandeur delighted in by some of the most powerful European monarchs of the nineteenth century. In order to form some idea of the degree of civilization attained by the Chinese, it may not be unsuitable here to allude to the extent and magnificence of the imperial city, where the lord of one third of the human race holds

his court. The capital is divided into two parts, the northern section of which covers an area of twelve, and the southern of fifteen square miles. Within the northern enclosure is the palace, which is the most splendid, as well as the most important part of Peking. According to the Chinese, this is a very superb residence, with "golden walls, and pearly palaces," fit for the abode of so great a monarch: to the unprejudiced eyes of strangers, however, it presents a glittering appearance, with its varnished tiles of brilliant yellow, which, under the rays of the meridian sun, seem to constitute a roof of burnished gold: the gay colours and profuse gilding applied to the interior, give the halls a dazzling glory, while the suite of court-yards and apartments, vieing with each other in beauty and magnificence, all contribute to exalt our apprehensions of the gorgeous fabric. We must not expect to find much there that will gratify the taste, or suit the convenience of those accustomed to admire European architecture, and English comfort; but in the estimation of the Chinese, their scalloped roofs, and projecting eaves, and dragon encircling pillars; with their leaf-shaped windows, and circular doors, and fantastic emblems, present more charms than the Gothic and Corinthian buildings, or the curtained and carpeted apartments of modern Europe. "There reigns," says father Hyacinth, "among the buildings of the forbidden city, a perfect symmetry, both in the form and height of the several edifices, and in their relative positions, indicating that they were built upon a regular and harmonious plan."

The grand entrance to the "forbidden city," is by the southern gate, through the central avenue of which the emperor alone is allowed to pass: within this gate is a large court, adorned with bridges, balustrades, pillars, and steps; with figures of lions, and other sculptures, all of fine marble. Beyond this is the "gate of extensive peace," which is a superb building of white marble, one hundred and ten feet high, ascended by five flights of steps, the centre of which is reserved for the emperor. It is here that he receives the congratulations of his officers, who prostrate themselves to the ground before the imperial presence, on new year's day, and the anniversary of the emperor's birth. Two more halls and three flights of steps, lead to the palace of the sovereign, which is called

the "tranquil region of heaven," while that of his consort is entitled "the palace of earth's repose;" to keep up the idea of the inseparable connexion subsisting in the Chinese mind, between the powers of nature, and the monarch of China; the latter of whom is, in the estimation of that idolatrous and superstitious people, the representative and counterpart of the former. Into this private retreat of the emperor, no one is allowed to approach, without special leave; and here the great autocrat deliberates upon the affairs of state, or gives audience to those who solicit his favour.

The Russian traveller, Timkowski, represents this as the "loftiest, richest, and most magnificent of all the palaces. In the court before it, is a tower of gilt copper, adorned with a great number of figures, which are beautifully executed. On each side of the tower, is a large vessel, likewise of gilt copper, in which incense is burned, day and night;" doubtless, to flatter the vanity of the imperial inhabitant, who fancies himself a god, though he must die like men. Beyond the residence of the emperor and empress, is the imperial flower-garden, laid out in beautiful walks, and adorned with pavilions, temples, and grottoes; interspersed with sheets of water and rising rocks, which vary and beautify the scene. Behind this garden, is a library of immense extent, vieing with that of Alexandria, in ancient, or of Paris, in modern times; and, further on, stands the gate of the flower-garden, which constitutes the northern outlet to the "forbidden city."

The above comprises the buildings in a direct line between the northern and southern gates. To the east are the council chamber, and a number of princely palaces; with a temple, designed to enshrine the parental tablets of the present imperial family. To the west of the principal line of buildings, stand the hall of pictures, his majesty's printing-office, the principal magazines of the crown, and the female apartments; which fill up this division of the enclosure, and render the whole, one compact and extensive establishment. This magnificent residence, though described in a page or two, is about two miles in circumference, surrounded by walls, thirty feet high, and twelve wide; built of polished red brick, and surrounded by a moat, lined with hewn

stone; the whole ornamented with gates and towers, and laid out in a diversified and elaborate manner.—*Medhurst.*

THE FIRST SABBATH.

TWICE had the sun risen on the earth, and during each of these two days he beheld some of the magnificent operations which were then going on. But on the third day of his rising, the seventh from the first creation, all around was silent and still; no little modest flower sprung up at once by the river side; no tall trees lifted their heads anew from the mountains, as escaping from confinement from the dark caves beneath; no new flocks browsed on the hills; no new herds roamed in the forests; no new fishes glistened in the waters; no new birds or insects glanced in the sunbeams; no second Adam and Eve appeared in another paradise, to hail, with their eyes turned towards the east, the first rays of the sun. But the same flowers blushed in the deep valleys, the same waving trees looked down from their lofty thrones, the same sheep, the same cattle, the same inhabitants of air and water were seen; seeming by their peaceful silence, to partake the universal repose of nature. And the same man and woman, sovereigns of the new-made world, were seen sitting under the shady bowers of Eden, prolonging the conversation of the previous day, and occasionally interrupting the general silence of creation by their songs of praise.

Oh, how sweet, how peaceful was the first sabbath! No want, no pain, no fear; and, above all, no sin, could disturb its hallowed tranquillity. Happiness, with steady and gentle light, beamed on every hill and valley, on every lake and river, on every lifeless and on every living thing, but chiefly on those two favoured beings, who, gifted with intelligence greater than that of brutes, possessed a pleasure superior to that of every other creature. Oh could we have seen the countenances of that happy pair, on this glorious day, what peace, what joy, what a heavenly radiance would have been reflected there. For how could they fail to be supremely happy, when they looked around on the earth covered with beauty, above on the heaven filled with Divine glory, and within on their own hearts, which were

inhabited by every holy feeling, and were the chosen dwelling-place of the Spirit of God.

In a world so full of misery and sin as ours is, it is delightful to look back, even through the mist of six thousand years, to that holy and blissful day. And, blessed be our God, there are some remnants of this purity and happiness still. The SABBATH yet remains—a day of rest and holy duty, in which those who love the Lord delight to meditate on his goodness, and to engage in his worship. And though the holiest of earthly minds are never entirely free from anxious cares, and sinful desires, yet there are times when the children of God seem to possess a happiness almost as great as that of Adam and Eve on the first day of rest.—*J. S. Carmichael.*

VANITY OF THE WORLD.

It is said in Colton's *Lacon*, that John Maddocks and Henry Quin, esquires, the former in the clear unincumbered possession of 6000*l.* per annum, and both in full possession of health as well as competence, destroyed themselves for no other reason but because they were tired of the unvaried repetitions and insipid amusements of life. Surely man at his best estate is altogether vanity. "What shall it profit a man, if he gain the whole world, and lose his own soul? or what shall a man give in exchange for his soul?" Infinitely to be preferred is the situation of the mechanic, the daily labourer in the fields, or the domestic servant, who, possessing little of the world's good, can exclaim, "The Lord is my portion, saith my soul, therefore will I hope in him."

CHRISTIAN REPROOF.

To any of his friends who had contracted the irreverent habit of taking God's name in vain, Mr. Wilberforce made a practice of addressing by letter his most serious admonitions; and he often said that, by this custom, he never lost, and but once endangered the continuance of a friendship.

"I wrote to the late Sir ——," he says, "and mentioned to him this bad habit. He sent me in reply an angry letter, returning a book that I had given him, and asked for one he had given me. Instead of it I sent him a second letter of friendly expostulation, which so won him over, that he wrote to me in the

kindest tone, and begged me to send him back again the book he had so hastily returned."

THE GOSPEL TESTIFIES OF CHRIST.

THE gospel of God concerns his Son; the whole of it is comprised in the knowledge of Jesus Christ: so that whoever departs one step from him, departs from the gospel. For as Jesus Christ is the Divine image of the Father, he is set before us as the real object of our faith. It is of him that the gospel of God, promised by the prophets, treats; so that he is not simply a legislator, or interpreter of the Divine will, like Moses, and the prophets, and the apostles. He has founded the gospel by his blood, and he communicates to it all the virtue it possesses. On this account, he himself says, "I am the way, the truth, and the life: no man cometh unto the Father, but by me."—*R. Haldane on Rom. i. 3.*

THE UNITY OF GOD.

It is a beautiful image, by which Cudworth demonstrates from the harmony of the universe, the necessary origination of the whole in all its variety of parts; from one all-comprehensive Mind: "As he that hears a concert of musicians playing a lesson of six or eight several parts, all conspiring to make up one harmony, will immediately conclude that there is some other cause of that harmony besides those several particular efficientes that struck the several instruments; for every one of them would be but a cause of his own part which he played; but the unity of the whole harmony into which all the several parts conspire, must needs proceed from the art and musical skill of some one mind, the exemplary and archetypal cause of that vocal harmony which was but a passive print or stamp of it: so, though the atheist might possibly persuade himself, that every particular creature was the first author or efficient of that part which it played in the universe, by a certain innate power of its own; yet all the parts of the mundane system conspiring into one perfect harmony, there must of necessity be some one universal Mind, the archetypal and exemplary cause thereof, containing the plot of the whole mundane music, as one entire thing made up of so many several parts within himself."

-DR. CHALMERS' LETTER ON DISTRICT VISITING.

MY DEAR MRS. FRY,—I shall feel a still greater interest in your doings among parishes than in your doings among prisons; and that, not only because the one is more a walk of general philanthropy than the other, but because it is a walk of higher and fuller promise. In reference to the moral disorders of society, they stand in the same relation to each other, that the method of prevention in medicine does to the method of cure. But what I build most confidently upon is, (to express it in the language of the schools,) an *argumentum a fortiori*, which I would construct on the degree of success that attended your former enterprise, warranting the expectation of a still higher degree of success in your present enterprise. I have ever held both your own experience and that of Mr. Howard to be immensely valuable, as establishing not only a most beautiful, but practically the most important lesson I know in the management of human nature; and that is, THE CHARM OR POWER OF KINDNESS, EVEN IN THE HEARTS OF THE MOST HARDENED AND WORTHLESS OF MANKIND. Let us carry back this lesson from dungeons to dwelling-places, and try, if a principle not extinct in the malefactor's cell, in what higher degree it exists, or with what more powerful effect it may be operated upon, throughout the homes and common habitations of the people.

This grateful sensibility in one bosom to the manifested goodwill of another, is surely a right and virtuous affection as far as it goes; and if it have been found, as by yourself, to survive that depraving process which the worst of criminals undergo, in what greater vigour may it confidently be looked for, anterior to that process, in the abode and on the domain of average humanity? The experiment which you have found to be successful in the veriest receptacles of the felon and the outcast, carries in it a bright and universal promise when it comes to be tried, as is now doing by yourself, in the large scale, and upon the field of human society.

I rejoice to hear from you of the perfect welcome and cordiality wherewith your visitors are received in the districts on which they operate. It is but the exemplification of what you experienced in circumstances which at the outset looked far more discouraging and un-

kindly. This grateful response on the side of the population, almost unexpected, I believe, forms a cheering prognostic, if the undertaking be rightly prosecuted and constantly persevered in, of your full and final success.

Irrespective, therefore, of the specific errand on which those of the higher go forth among those of the lower classes, in the very mingling of the two, in the frequency and closeness of their personal intercourse, there is an incalculable benefit. Even though you should fail in certain of your objects, you will have gained incalculably in the growth which your operations must promote of a kindlier and better spirit between the rich and the poor. They only require to know each other more, that they may love each other more. To sweeten the breath, as it were, of the community, and to break down those malignant and social prejudices which separate one class from another, is in itself a service of the highest order, and one which in our present distempered condition is the most urgently called for. To augment the feeling and the recognition of a common brotherhood among men is of itself an achievement of the greatest value. This you will at all events do; but I trust you will do more, and that good not of a higher certainly, but of a more substantive and tangible description will be the result of your present labours, the distinct tendency of which is to raise the character as well as comfort of the lower orders, to elevate both the moral and economic state of our population.

But I have indulged too long in these prefatory and general considerations; and let me now offer a very few remarks on the nature and regulations of your scheme.

1st. The great excellence, I apprehend, of your scheme lies in the very minute division of a general task, and by which you assign an easily manageable part to each individual member of your agency; and, secondly, in your laying the movement on the doers of the good work, and not on the subjects of it.

There hinges an immense difference in the result of this last peculiarity. In every case where the object of an undertaking is the diffusion of a moral benefit, then, instead of the people being left to seek after it, it is clearly the part of the dispensers of it to go forth among the people. They may with all safety be waited for, when the charity addresses

itself with force and immediateness to their physical appetencies. Let an almshouse or a soup kitchen be placed in the midst of a population, the agents in the distribution may be as stationary as they will, they will soon be overcrowded and overdone by the multitude who repair to them. But it is not so with the charity which aims at the supply of their moral and intellectual wants. For the thorough fulfilment of this charity the people must be sought out instead of being waited for. Under a system of visitors, education, both Christian and common, may be stimulated onward to a far greater amount by the moral suasion of philanthropists, each in his own assigned portion of territory assiduously and aggressively urging it upon the families. Now it is but an extension of this principle when, beside the church and the school to which it is so obviously applicable, it is made to include also a savings bank; for this latter institution comes within the same general analogy as these others. It does not fall in with any strong or immediate appetency of nature, but rather thwarts and annoys it; and ere the people will avail themselves, their indolence and love of present enjoyment must both be overcome. They must be nursed into the habits of accumulation and foresight, for they will never acquire them spontaneously. Hence the immense good of such an agency in your employ for this purpose. Instead of waiting to receive deposits, the members of this agency go forth, and at regular intervals of time, to request them. We feel quite assured that a tenfold greater amount of deposits on the whole will be realized in this way of it, and I may add a hundredfold greater from that class who, as being the most sunken both in character and comfort, it is most desirable to recall from the degeneracy into which they have fallen.

2nd. I doubt if a stipulated premium for the deposits will do, especially in Scotland. Indeed, I should feel a great insecurity as to the final result of the whole enterprise if I thought that such a device were indispensable for the stability of the system in England or anywhere. At the most, I hope it will only be required as an initial and temporary expedient for nursing the people into a habit of accumulation, after which the extraneous inducement held forth at the outset will be found unnecessary. My own preference would be for making the

trial without it, even from the very commencement of the operation; for trusting to the efficacy of that kindness and moral suasion wherewith the visitors would recommend the practice, and point out the good of it; at the same time offering a place for the sure custody of their accumulated savings, and then trusting afterwards to their own experience of the benefit when they had become alive to the charm of property, and felt both the security and the importance which they derived from it. This does not hinder any visitor having the charge of twenty-five or fifty families from trying the effect of a premium in the few extreme instances which might appear to require it; but this should form part of his unseen and extraordinary management. It should not, in my estimation, be an ostensible feature of the system; and neither should the allowance of a higher than the market rate of interest. I should altogether despair either of a general or a permanent result, if it rested on any external or precarious support of this kind. Your admirable system does not need, I think, this kind of forcing and fostering. The great engine for its establishment is the constant assiduity of visitors plying their new-formed acquaintances, and at length their friends, with the general consideration of morality and prudence, and, on the strength of these alone, building up a habit which will afterwards be sustained by their own experience of its benefits; and all this without any deviation from the general economy of things, or any violence done to it, whether by unnatural bribes, or unnatural and higher rates of interest than they obtain throughout the country at large.

3rd. It is not in the language of doubt, but of decision, that I would oppose the introduction into your system-visiting of any provision respecting the supply of indigence. I would keep clear of this subject altogether. The visitors individually may do as they please; but I feel quite assured, that by admitting this as part of the announced plan of your society, you would convert it into an engine in Scotland for the spread and increase of pauperism. Even in England, I should hope that there is no material necessity for such a regulation; and in this I think I am borne out by the report for Lowestoff, in which town 1768 cases have been relieved by a society distribution of about 50%. In

this country, I should think it vastly better that this sum had found its way among the destitute by the countless, though hidden channels, of private benevolence; whereas by that benevolence being made public, there are expectations of charitable aid encouraged which a sum so small never could realize; besides that, it raises a spirit among the population adverse to those habits of economy and accumulation, the establishment of which is, next to education, the best object of your society.

If they who distrust the operations of private benevolence should allege that the 50% would not have found their way among the indigent, we on the other hand ask, if the distribution of this sum amongst 1768 people was at all essential to, or in any sensible degree promoted, the well-being of the population.

4th. I have already said that I would not attempt the formation of a society for Edinburgh, or even for the West Kirk parish: but for some given district, as small as a trusty set of agents can thoroughly overtake, where the results, like those of an experimental garden, or experimental farm in agriculture, might lead to the surest establishment of some great and general lesson in the business of philanthropy. I shall be exceedingly happy to hear if my friend Mr. Paul can assist you in fixing upon some such locality.

I shall conclude with a translation of the four directions in the 17th page of the Liverpool account, so as to exhibit my own views of what is best to be done.

The objects of a Society for a district in or about Edinburgh are:

1st. To assist the industrious in establishing habits of frugality and carefulness.

2nd. To secure for them the benefits of all those medical institutions which are applicable to the diseases or accidents into which any of them may have fallen.

3rd. To receive weekly the deposits which they might be enabled to make, and place them in the District Savings' Bank. For this object, and the general advantages of the intercourse, it is desirable that each visitor should repeat his calls weekly.

4th. To take measures for securing a good and cheap education, and to make it universal among the families.

KNOWLEDGE REQUIRES EFFORT.

SINCE all being reposes on the one great Being, who originally created and ever sustains it, to work his will, the whole history of nature may well be expected to transcend our comprehension: yet that history, whether contemplated in reference to design or execution, is but one picture of wonder, of sublimity, of beauty, and especially of wise contrivance, the principal features of which it is delightful to trace. Whether we succeed or not in disclosing the hidden springs of all that is so exquisite, the most instructive comparisons are suggested. Thus we soon learn that no workman, however expert, can ever, in point of adaptation, either simple or elaborate, come near to the contrivances of the eye, the ear, or of the joints, muscles, valves, which anatomy presents to our contemplation; and that no human wisdom can ever reach the appropriation of means to ends, exhibited by instinct; that a spider, a silkworm, a mole, a bee, or an ant, may confute an atheist; that the beaver evinces skill surpassing that of any human architect; that a muscle, with its cable and anchor, may excite more reasonable wonder than a ship. And, with regard to the heavenly bodies themselves, we feel that it is not their magnitude, brilliancy, beauty, or the unbroken order of their revolutions, that excites our highest admiration, but the persuasion that even they, both in their stations and their motions, are made subservient to human good; while all of them are so many irresistible witnesses of the sustaining providence of the great Supreme.

Let the works of nature as well as the works of art, while they call forth your admiration, call forth also a desire to explore them, and thus tend to exercise and improve the habit of steady and successful research. In a thousand instances, which will occur as you proceed, you must do more than gaze and wonder; the rudest peasant can do that: you must inquire, must investigate, must have recourse to reasoning, to observation, to experiment.

Take, for example, a grain of mustard-seed, and a grain of gunpowder; is there any thing in the colour, size, weight, or other sensible qualities of these respective substances which would enable you, *in limine*, to predict, that a spark falling upon a heap of the one

would be extinguished, while if it had fallen upon a heap of the other, it would have produced sudden and destructive conflagration? No: this knowledge is not a result of passive inspection, however patient. But the youngest boy that ever fired off a squib or a cracker, and knew something of its structure or composition, from that moment ascertains an important quality of detonating substances; nor ever after will you detect him, child as he may be, loading a pistol with mustard-seed, or sowing gunpowder in a garden.

A single experiment, then, happily selected or carefully conducted, *may* lead to a momentous discovery; yet, in the usual routine of scientific deduction, it is advisable, nay, it is often *necessary*, to trace our way by a cautious and judiciously conducted process. It may, indeed, be laid down as a universal maxim, that there is no infallible, and at the same time, *easy* method of attaining either excellence or eminence. There are no by-paths to the temple of philosophy. The small portion of learning or science which is attainable by the help of facilitating expedients, is but a temporary, as contrasted with a durable edifice—a tent contrasted with a castle. It is as unreasonable to hope to acquire knowledge, without undergoing the labour by which it has been usually gained, as it would be to expect that an acorn would become an oak without passing through the ordinary process of vegetation. We build up our knowledge, augment our pleasure, and perfect our nature, by struggling with and surmounting obstacles; and the earlier you assume this as a practical maxim, the better.

It is one thing, however, to be, if I may so speak, the intellectual creator of a department of science, by invention, by discovery, and a due concatenation of principles and propositions; and another, and happily a much easier thing to *learn* a science so as to comprehend it in all its bearings and applications. Nothing beyond the ordinary powers of mind is requisite to study successfully any branch of philosophy. Facts, which are the materials of science, may be recollected and classified by him who has not opportunity to collect them; experiments may be understood by him who probably could not make them; and a logical system of scientific truths, appropriately

demonstrated, may be studied with delight, and thoroughly comprehended, by one who is altogether incompetent to write a treatise; it being, in truth, this obvious difference in the scale of acquisition, that constitutes the main distinction between the pupil and the preceptor.—*Dr. Olinthus Gregory.*

THE WHEEL AND AXLE.

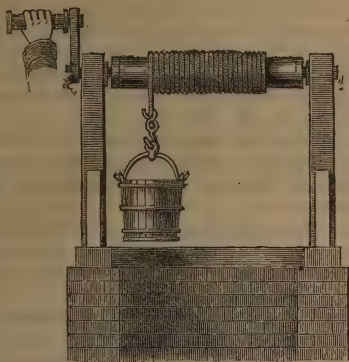
THE wheel and axle is only a modification of the lever, and has the same mechanical property. In all cases where a considerable force is required to raise a body through a small space, the lever may be used with advantage. But if a weight is to be raised to a great height, some other instrument must be employed; and the wheel and axle is usually the most advantageous.

The wheel and axle consists of a cylinder, or axle, passing through a wheel to which it is firmly fastened, both moving together, and the whole instrument resting on the extremities of the axis. The power, in this instrument, is always applied to the circumference of the wheel, and the weight to be raised is attached to the axle by means of a cord. The nature of the power applied to the wheel must be governed by circumstances; sometimes a weight is attached, and at other times it is moved by animal power, and is then furnished with a winch, or with spokes. When spokes are employed, we may consider the wheel and axle as a series of levers: the centre of the axis is the fulcrum; the body attached to the axis by a cord is the weight, and the power is that animal force applied to the circumference of the wheel.

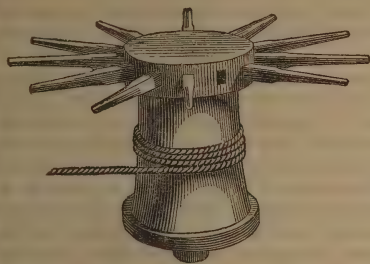
The condition of equilibrium in this instrument is the same as in the lever. The power multiplied by the radius of the wheel is equal to the weight multiplied by the radius of the axle. Let the weight be 8lbs, and the radius of the axle three inches, then eight multiplied by three will give twenty-four. Then let the radius of the wheel be twelve inches, and a power equal to 2lbs. will establish the equilibrium, for twelve multiplied by two is equal to twenty-four. It is evident, then, that the mechanical advantage to be gained from the use of the wheel and axle depends on the ratio

between the radius of the wheel and the radius of the axle.

The windlass and the capstan are the most familiar examples we can give of the wheel and axis, and they only differ from each other in the manner of applying the power. In the common



windlass, generally used for raising water in wells, the power is applied by the means of a winch, which is a rectangular lever. The capstan



is used in vessels to raise the anchor, and the power is applied by levers, the axle being in a vertical position for the sake of convenience. In the treadmill, the power is applied to the circumference of the wheel.

The treadmill is employed for the punishment of criminals. It consists of a large wheel, from twenty to thirty feet wide, and provided on the surface with steps, on which the prisoners are placed. Their weight puts the wheel in motion; and they are compelled to commence and continue a motion of the legs similar to that of a person walking up stairs, maintaining themselves in an upright posi-

tion by holding on an horizontal bar, fixed above them. Now, in this instance, animal strength is the power applied to the wheel; and although it has not yet been made practically valuable to any extent, there can be no doubt that it might be so applied, in the same manner as water, air, or steam. It has been recently proposed to connect a treadmill with a series of pumps for raising water.

As it is sometimes found necessary to introduce a combination of levers, so it is also not unfrequently necessary that we should transmit the effect of a power through a system of wheels and axles. Such an arrangement is but a modification of the compound lever, as the wheel and axle is a modification of the simple lever. In estimating, therefore, the effects of complex wheel work, we must consider each wheel and axle to act as a simple lever. Let the power be applied to the circumference of the first wheel, and the effect will be transmitted to the axle, which is made, by some means, to communicate with the circumference of the second wheel, and from it the effect is transmitted to its axle, and so on, till the weight or resistance is acted upon.

Various methods have been adopted to transmit the force of the axle to the succeeding wheel. Not unfrequently a rope or strap is used, which is passed round the wheel and then to the axle, on which it is intended to act. The rope or strap communicates the motion in consequence of the tension of the strap and its friction against the surfaces over which it passes. When the wheel is intended to revolve in an opposite direction to the axle, the strap is crossed; when they are required to revolve in the same direction, the strap is not crossed.

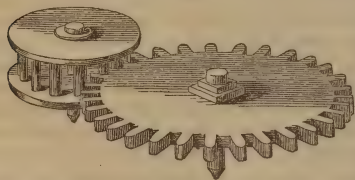
The most usual way of transmitting the power from an axle to the succeeding wheel, is by means of teeth or cogs. The cogs on the surface of the wheel are called teeth; and those on the surface of the axle, or pinion, as it may now be denominated, are called leaves. Now the leaves of the pinion are so arranged that they may be proportional to the teeth of the wheels; and the number of teeth and leaves must, as is evident, be proportional to the circumferences of the wheel and pinion. And as the circumferences of circles are as their radii, so the number of teeth and leaves must be proportional to the radii.

In calculating the advantage gained by a system of wheels and axles, whether united by cords and belts, or by teeth and pinions, the weight is to the power, not as the sum of the radii of the wheels to the radii of the axles, but as their products. In determining the condition of equilibrium in a system of wheels and pinions, we have only to substitute the number of teeth and leaves, for the radii of the wheels and axles. The power multiplied into the number of teeth in all the wheels, must be equal to the weight multiplied by the product of the number of leaves in all the pinions.

Different names are given to wheels according to the position and direction of the teeth; thus we have the spur, the crown, and the bevel gear.

A spur wheel is one in which the teeth are in the direction of the radii, and perpendicular to the axis. A crown wheel is that in which the teeth are parallel to the axis, or in other words, perpendicular to the plane of the wheel. A bevel wheel is one in which the teeth are oblique to the plane and axis of the wheel. These wheels are variously employed in the construction of machinery, according to the character of the motion required.

Sometimes the teeth of a wheel are made to act upon a wheel called, on account of its form, a lantern, instead



of working in the leaves of a pinion.

The student may at first find some difficulty in understanding the applications of the various forms of wheel work as applied in machinery, but there are few branches of mechanics which are more interesting; and the trouble and time expended in the acquisition of the knowledge, will soon be repaid in the interest of the knowledge acquired, if the acquisition of it be not itself a pleasure.

THE REFUGE.

In the prospect of the dreadful calamities that were coming on his people from the Chaldeans, the prophet Habak-

kuk was greatly distressed. He had hoped that the Lord would reform the nation by gentler corrections, or by raising up eminent instruments for that work; he was astonished that God would punish his offending worshippers by a people so idolatrous and iniquitous; and he trusted that they would not finally be left in their hands. In these circumstances, as one appointed to stand on his watch-tower, to give warning of the approach of friends and foes, he called upon God, and humbly waited to know what answer there was for the people, who started objections he knew not how to obviate; and who reproved and contended with him for uttering such alarming predictions.

Accordingly the Lord answered him, and said, "Write the vision, and make it plain upon tables, that he may run that readeth it," Habakkuk ii. 2. In this instance, there is an allusion to an eastern practice. Writing tables were used in and before the time of Homer, who refers to the inscribing of very pernicious things on one of these having two leaves. They were made of wood, consisted of two, three, or five leaves, and were covered with wax; on this impressions were easily made: they lasted long, and were very legible. It was also a custom among the Romans, for the public affairs of every year to be committed to writing by the pontifex maximus, or high priest, and published on a table. Such tables were exposed to public view, so that the people might have an opportunity of becoming acquainted with their contents. It was usual, moreover, to suspend laws approved and recorded, on tables of brass in their market-places and temples, that they might be seen and read. In like manner, the Jewish prophets used to write, and expose their prophecies publicly on tables, either in their own houses, or in the temple, that every one that passed by might read them: a course which Habakkuk was now commanded to take.

That in this there was a reference to gospel times appears, among other things, from the fact, that the 4th verse of the chapter is thus applied three times by an inspired apostle, Rom. i. 17, Gal. iii. 11, Heb. x. 37, 38. In the exercise of faith, there would be a preparation for approaching calamities, and also an enjoyment of the blessings promised through the great Deliverer, who was to appear in

the fulness of time. Those who credited the Divine declarations would be safe; but such as through the pride of their hearts rejected the Divine counsel, would assuredly be destroyed.

This, then, was the fact which the prophet was required to inscribe in large and legible characters, and to have suspended in the place of public concourse. But the end contemplated is often mistaken; it is commonly supposed that the intimation was to be so conspicuous, that "he who runs might read,"—that though he quickly passed, it might not fail to catch his eye, and thus secure an inlet to his mind. Here, however, the passage is inverted, for it distinctly declares the design to be "that he may run that readeth it;"—that, as he beholds the warning of impending danger and the only way of escape, he may flee for refuge to "lay hold on the hope set before" him.

The object proposed is therefore easily illustrated. As the man-slayer, apprehensive of the avenger of blood, saw the road to a city of refuge, and the inscription "asylum, asylum," and was thus directed and aided in his flight, so that he might be secured from the effects of private revenge, until cleared by a legal process, the transgressor might betake himself without delay to Him who alone is "mighty to save," Numb. xxxv. 6—15, Deut. xix. 4—10, Josh. xx. 7, 8.

Nor let it be overlooked, that this is still the design of the gospel. "The wrath of God is revealed from heaven against all ungodliness and unrighteousness of men;" and the only refuge for sinners is the adorable Redeemer. His blood atones for our sins, his Spirit sanctifies the soul of every believer, and then there is "no condemnation." Inward peace accords with outward security, and is the pledge of "quietness and assurance for ever."

As certainly, too, is an immediate reception of the Divine testimony commanded. "*Now* is the accepted time; *now* is the day of salvation." Delay is but another form of refusal; it is the offspring of unbelief; and "he that believeth not, is condemned already." Safety can only be secured by instant obedience to the command: "Look unto me, and be ye saved, all the ends of the earth; for I am God, and there is none else." Oh that it may be ours, if hitherto careless, to comply *at once*, with this Divine and gracious requisition!

THE SALT SPRINGS AT MANDROVY.

THE following account of a visit to the saline springs at Mandrovy, in the Betsileo country, Madagascar, is given by Mr. Cameron, by whom they were visited in 1834:—

When we arrived at the first village in Betsileo, we inquired of our host if there were any natural curiosities in the neighbourhood. He soon mentioned a place where he described the ground as over-spread with salt, and the springs as having a saltish taste. On the following morning we visited the spot, and found within a space of forty or fifty yards, several springs, the united waters of which might produce five or six gallons per minute. The water had an agreeable acidulous taste, apparently highly impregnated with carbonic acid gas, which speedily separated from the water, adhering in small globules to the sides of the glass with which we took up some of the water. The same gas appeared rising in globules from all the springs.

Where the ground was damp, it was covered with an efflorescence, as were also the stones which were moistened by the stream as it flowed from the springs into an adjoining brook.

The people of the neighbourhood informed us that they drive their cattle to the place to drink the water and lick up the salt, which they say has a remarkable tendency to promote their fattening for slaughter; but we could not learn that the people themselves used, for any purpose whatsoever, either the water of the spring or the salt. The cattle daily driven to the spot, had gradually worn away much of the earth, and exposed several masses of granite, and also a thin layer of limestone, six or eight inches thick, which in some places presented the appearance of marble. The layer, however, did not consist of calcareous matter alone, but had embedded or inclosed within it, pieces of basalt, quartz, and, apparently, feldspar, all of which extraneous substances seem to have been subjected to considerable friction, for they were round and smooth, like the stones found in rapidly flowing rivers. There were also many pieces of decayed wood enclosed in the limestone, some as thick as a man's finger, others of a smaller size. We found also some varieties of fossils in the mass. One fragment of stone contained the impression of a serpent—the part of the body which lay uppermost seemed to have been

crushed, as the lower part only was distinctly marked.

When a thermometer was immersed in the adjacent stream, it stood at 66° ; when in the spring, it stood at 80° . The specific gravity of the water rather exceeded that of common water, being in the proportion of 1000 to 1004. When a little water was added to it, a white precipitate was immediately formed; the same effect was produced when nitrate of barytes was added. When nitrate of silver was added, a white precipitate was produced, which first turned brownish, and soon afterwards assumed a black appearance. The water decomposed soap.

At a place about seven miles distant, near the western extremity of a succession of volcanic hills, six or eight miles in extent, there is a spring rising among a mass of volcanic rocks, in which the thermometer rose to 138° . The water, however, did not seem to possess any strongly marked saline or other properties.

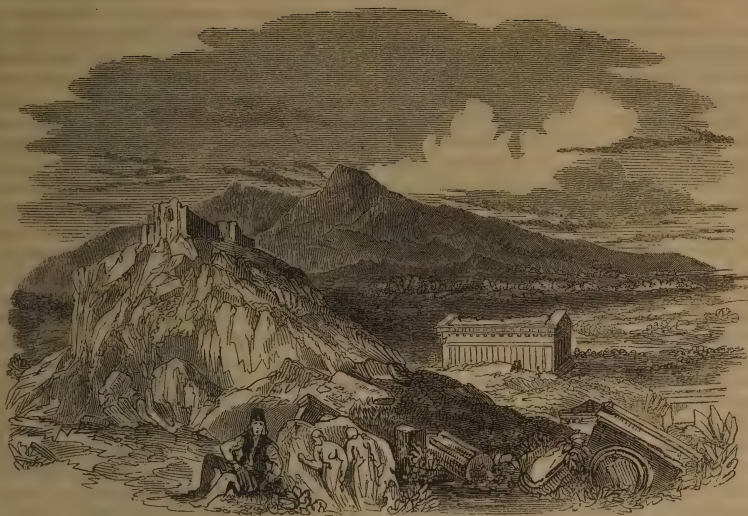
About seven miles to the east of the region, in which the last spring was seen, we came to a well which was described to us as possessing the following marvellous properties:—In appearance, it was said always to resemble boiling water, while it was at the same time perfectly cold; and if any one attempted to bathe, it was said he would faint on going into the water. On reaching the well, it presented the appearance of a large cauldron beginning to boil; and we had no doubt but the latter part of the report was correct, as the surface of the water was about three feet below the ground at the edge of the well, instead of flowing over its side. The water seemed to find an outlet by a covered passage, as, at a considerable distance from the well, we heard a rumbling noise under ground, resembling that which would be produced by the bubbling of gas through water. The boiling appearance arose from the discharge of large quantities of carbonic acid gas, which constantly escaped from the water. This gas, from its superior density to common air, would certainly, at least in a quiet day, lie in the cavity of the well, and produce fainting in those who entered the water. I showed the effects of carbonic acid gas upon a grasshopper, which enabled some of the natives, who accompanied us, to understand the cause of those effects which they had described.

At a distance of about a mile and a half, we visited another spring, or rather an assemblage of springs, rising off a bed of limestone. These springs also emitted great quantities of carbonic acid gas. One spring, in particular, discharged it in such abundance as to produce a noise which might be heard at the distance of several yards. The strata in this locality appeared to be limestone; and in some places there were extensive caves, from the inside of the roofs of which beautiful stalactitic formations were suspended. What appeared to us remarkable was the great quantities of salt, which was found in a state of efflorescence on these rocks, and also on the damp ground in the neighbourhood. The natives of this part of the country also drive their cattle to the place to lick the salt. Here, also, instead of planting rice, or grain, or roots, for food, as is usual in other places, the natives plant a kind of flag, of rapid growth, which imbibes a large portion of the saline properties of the soil on which it grows. This rush they cut several times in the year, burn it, and from the ashes extract a salt, which they pack up in baskets of rush or grass, sell in their markets, or send to the capital. From the manufacture of salt of very inferior quality, by the above simple process, the people of this neighbourhood are said to be comparatively rich. The salt formed on the ground was a remarkably pure carbonate of soda, which we used afterwards in the manufacture of soap in Tananarivo.

Salt is an article in considerable demand at the capital and other thickly populated parts of the country; and as the demand has been such as to induce the natives to cultivate the rush above referred to, for the sake of obtaining a supply, it seems remarkable that they have never used the superior kind of salt furnished by the laboratory of nature in this part of the country. The probability is, they have been deterred by considerations more or less connected with their superstitions.—*Ellis's History of Madagascar.*

OCCUPATION.

OCCUPATION cures one half of life's troubles, and mitigates the remainder. A manacled slave, working at the galleys, is happier than a self-manacled slave without any employment.



The Areopagus on Mars' Hill.

ATHENS.

ATHENS, the capital of Attica, the glory of ancient Greece, was situated on a promontory, formed by the confluence of two classical rivers. Its foundation is ascribed to a period so remote as 1550 years before Christ. It was surrounded by walls of great extent and strength; a bay formed by projecting rocks, furnished a harbour, in addition to others, at once spacious and secure; and the surrounding shore was covered with edifices, the splendour of which was very great.

The Acropolis, the glory of Grecian art, stood in the centre of Athens. The whole city was originally built on this elevation, but as it was extended, the Acropolis answered the purposes of a citadel. Here the lover of the fine arts might pass days of delight, in surveying the beauties and elegancies, measuring the proportions, and observing the characteristic peculiarities of the productions of the painter, the sculptor, and the architect. But the chief ornament of Athens was the Parthenon—the temple of Minerva—two hundred and seventeen feet in length, and ninety-eight in breadth; which, after its destruction by the Persians, was rebuilt by Pericles, with great additional splendour. It con-

tained the statue of Minerva, a masterpiece of art, sculptured by Phidias; its height was thirty-nine feet, and its substance of ivory, entirely covered with pure gold. Magnificent entrances to it were formed by the Propylea, which was of white marble. Near this edifice was the Erechtheum, of the same material, consisting of two temples, one to Minerva, the other to Neptune. Various other objects possessed peculiar interest: as the Academy, where Plato taught; the Lyceum, from whence Aristotle diffused the light of science; the portico, called Pœcile, chosen by Zeno, as the place of his lectures; and the garden in which Epicurus indulged at once his fondness for society and rural scenery. Other associations increased the interests of particular districts: as the Prytaneum, or senate-house; the Pnyx, or forum; each being the theatre of important events.

Among these objects, the Areopagus, an engraving of which appears at the head of this paper, would be peculiarly conspicuous. Its name was derived from two Greek words meaning The Hill of Mars, and it was applied to the sovereign tribunal of Athens, formed of the senate of that illustrious city, which assembled on an

eminence. This supreme council originally consisted of only nine persons, who had previously discharged with honour and fidelity the office of archons, an order of magistrates that succeeded the kings; but sometimes the number of the areopagites, or senators, amounted to two or three hundred. They sat in judgment in the open air, and only during the night, that their minds might be less disturbed, and their decisions more accordant with the laws. At first they took cognizance of criminal causes only, and the severity of their judgments was exceedingly dreaded, particularly with regard to murder; a horror of which they wished to diffuse among the citizens. In the course of time, however, blasphemies against the gods, contempt of mysteries, and the introduction of new ceremonies and divinities, were also brought before this tribunal.

According to Justin Martyr, Plato, on returning to Athens, after his travels in Egypt, where he acquired some knowledge of the unity of God, was anxious to dissemble and conceal his sentiments, lest he should be compelled to appear before the areopagites. But it was otherwise with the great apostle of the Gentiles. On his visit to Athens, he did not fail to see that it was full of idols. Every object of worship in almost every known nation had a niche in its pantheon; so that in this renowned city, there are said to have been more images and statues than in all the rest of Greece; a fact which led a satirist to remark, that in Athens a god was found more easily than a man. No wonder then that we read of the spirit of Paul being "stirred in him, when he saw the city wholly given to idolatry." In the altar inscribed, "To the unknown God," he witnessed a melancholy acknowledgment of the ignorance that prevailed. The only true God was the only God unknown. A sense of the dishonour done to the Most High, must therefore have deeply affected the heart of the apostle. Could angels weep, their tears would fall on such appalling spectacles of human impiety. He could not only observe its character and effects, but trace them to their cause. For why were the people "filled with all unrighteousness, fornication, wickedness, covetousness, maliciousness?" Why were they "full of envy, murder, debate, deceit, malignity; whisperers, backbiters, haters of God, despiteful, proud, boasters, inventors of evil things, disobedient to

parents, without understanding, covenant-breakers, without natural affection, implacable, unmerciful?" Why was it said, "Knowing the judgment of God, that they which commit such things are worthy of death, they not only do the same, but have pleasure in them that do them?" It was because "they did not like to retain God in their knowledge, God gave them over to a reprobate mind!" Their state of guilt and inevitable misery was a righteous infliction for their enmity to Divine truth. In their history, therefore, we have a beacon-light, to warn us of an evil to which every human heart is prone.

Filled with compassion for the Athenians, who were perishing for lack of knowledge, Paul preached unto them Jesus and the resurrection; and the consequences which Plato feared, fell on him. The people, supposing that he thus urged on their regard deities of which they had not before heard, brought him before the areopagites, where, however, his defence was productive of good, and the means of bringing several persons, among whom was Dionysius, one of the judges, to an acquaintance with Christ. Acts xvii. 16—34.

In the revolutions of empires, Athens has long been no more. What it was when visited by Dr. Walsh, in 1821, presents a striking contrast to its ancient state. That traveller says: "The city contains about 1500 houses, of which 1000 are inhabited by Greeks; but it is not easy to describe a town where you see neither streets nor houses. Conceive, then, a mud wall, or one not much better or stronger than that of a parish pound, enclosing an area of about two miles in circumference; conceive this area to be filled and intersected with long, crooked, narrow, dirty lanes, not half so wide or so clean as those of the worst fishing town in England; conceive these dark and winding passages, enclosed by high, mouldering walls, in which there are gates like prison-doors, hammered with nail-heads, opening in the middle, and always fastened by an iron chain, passed across through two large rings on the outside, as if the master, like a jailor, had taken care to lock up all the prisoners when he went abroad; conceive every thing silent and lifeless in these lanes, except at long intervals, a savage dog uttering a dismal howl, a solitary Turk loosening or fastening a chain to let himself in or out, or

a woman cautiously peeping through a crevice beside the gate; and this will give you a general impression of the present city of Minerva. It is not to be imagined what a contrast exists between its actual state and what you expect to find it. Modern Rome, so sadly degenerated from its former appearance, yet still bears marks and evidences of its pristine grandeur: but Athens is a miserable mass of hovels, among which you can scarcely discern a trace of its ancient glory; the few fragments of it that remain are to be sought outside the city."

Not only has the Parthenon suffered from the erosions of time, but also, situated on a rock and in a fortress, from the convulsions of earthquakes, the shells of the Venetians when they besieged the Acropolis, and the explosion of a Turkish magazine. It is little more than a heap of ruins, from which Lord Elgin obtained some of those splendid specimens of ancient sculpture, which now adorn our National Museum.

The temple of Theseus, having been built in a low situation, and near no fortress, has escaped the accidents which proved fatal to the Parthenon. It is singularly perfect, and recalls to mind the former state of the city. Yet on the marble steps, and just under the beautiful colonnade, Dr. Walsh observed some of the most dirty and squalid Greeks he had seen, preparing the intestines of animals to make cat-gut; and at a little distance, two lordly Turks, showily dressed in scarlet pelisses, occasionally approaching and directing their operations; specimens of the abject degradation of the one people, and of the domination of the other, from which such fearful suffering has been experienced.

Since the period thus referred to, Athens has experienced another change. In 1836, the foundation stone of a new palace was laid by the king of Bavaria, and various other buildings were erected. Three great streets had been, for some time opened, the Adrian, Athena, and Æolus street, all assuming a regular appearance. Athens appeared spread out into a fan shape to the north of the Acropolis, its diameter being probably a mile and a half, and its population about 15,000. Other improvements have also been effected. Still modern, as compared with ancient Athens, reads us many a practical lesson. W.

JOURNAL OF A TRAVELLER IN NORTH AMERICA, BEYOND THE ROCKY MOUNTAINS.*

A MOUNTAIN PROSPECT.

Aug. 25, 1835.—I took an Indian, and went up to the top of a very high mountain, to take a view of the scenery around. The prospect was as extensive as the eye could reach, diversified with mountains, hills, and plains. Most of the mountains were covered with woods, but the hills and plains were covered with grass, presenting less of bright green, however, than might be expected, if the summers on this side of the mountains were favoured with rains as on the east. The Rocky Mountains at the east presented the appearance of an immensely large bank of snow, or large luminous clouds skirting the horizon. The Trois Tetons were in full view, and not very far distant at the north. They are a cluster of very high pointed mountains, not less than ten thousand feet, rising almost perpendicularly, and covered with snow; five in number, but only three of them are so very high as to be seen at a great distance, and therefore take the above name. Here I spent much time in looking over the widely extended and varied scenery, sometimes filled with emotions of the sublime, in beholding the towering mountains; sometimes with pleasure in tracing the windings of the streams in the vale below; and these sensations frequently gave place to astonishment, in viewing the courses in which the rivers flow on their way unobstructed by mountain barriers. After some hours occupied in this excursion, I descended to the encampment, much gratified with what I had seen of the works of God. The soil in this valley and upon the hills is black and rich, and the time will come, when the solitude which now prevails will be lost in the lowing of herds and bleating of flocks, and the plough will cleave the clods of these hills and vales; and from many altars will ascend the incense of prayer and praise. Tai-quin-wa-tish the principal chief of the Nez Percés, took me to his company of horses, and gave me one in token of his friendship, and probably not without the motive to enlist me in their favour. The horse was finely made, and of the beautiful colour of intermixed cream and white.

* Parker's Journal of a Tour under the Direction of the American Board of Commissioners for Foreign Missions; an interesting work, not yet known in England.

On the 28th, removed camp, and passed over a mountain so high, that banks of snow were but a short distance from our trail. When we had ascended two-thirds of the way, a number of buffaloes, which were pursued by our Indians, came rushing down the side of the mountain through the midst of our company. One ran over a horse, on the back of which was a child, and threw the child far down the descent, but it providentially was not materially injured. Another ran over a packed horse, and wounded it deeply in the shoulder. The buffaloes are naturally timid, yet when they have laid their course, and by being frightened are running at full speed, it is seldom they change their direction, let what will be presented.

I noticed nothing particularly new in geology, excepting upon the highest parts of the mountains granite of very light colour. Our descent was through woods more dense than those on the other side, and the most so of any since we left the waters of the Missouri. Many parts of the descent were of almost impassable steepness; and part of the way down a rough, deep ravine, in which a stream of water commences and increases from springs and rivulets to considerable magnitude, and winds its way through the valley of Pierre's Hole.

BATTLE OF PIERRE'S HOLE.

On the 29th, removed our encampment, and travelled five hours along this valley to the place, where, two years before, two fur companies held their rendezvous. Pierre's Hole is an extensive level country, of rich soil, well watered with branches of Lewis's river; and is less frosty than any part we have gone through this side the rocky chain of mountains. The valley is well covered with grass, but like most other places is deficient in woodland, having only a scanty supply of cotton-wood and willows scattered along the streams. The valley extends around to the north-west, as far as the eye can reach. We expected to have found buffaloes in this valley, but saw none. As parties of Blackfeet warriors often range this way, it was probable they had lately been here, and frightened them away. As we were on our way from our last encampment, I was shown the place where the men of the fur companies, at the time of their

rendezvous two years before, had a battle with the Blackfeet Indians. Of the Blackfeet party there were about sixty men, and more than the same number of women and children; of the white men in the valley, there were some few hundreds who could be called into action. From the information given me, it appeared that these Indians were on their way through this valley, and unexpectedly met about forty hunters and trappers going out from rendezvous to the south-west on their fall and winter hunt. The Indians manifested an unwillingness to fight, and presented them tokens of peace; but they were not reciprocated. The Indians who came forward to stipulate terms of peace, were fired upon and killed. When the Indians saw their danger, they fled to the cotton-wood trees and willows which were scattered along the stream of water, and taking the advantage of some fallen trees constructed as good defence as time and circumstances would permit. They were poorly provided with guns, and still more poorly with ammunition. The trappers keeping out of reach of their arrows, and being well armed with the best rifles, made the contest unequal, and still more unequal, when, by an express sent to rendezvous, they were reinforced by veterans in mountain life. The hunters, by keeping at a safe distance, in the course of a few hours killed several of the Indians, and almost all their horses, which, in their situation, could not be protected, while they themselves suffered but small loss. The numbers killed on both sides have been differently stated; but considering the numbers engaged, and the length of time the skirmishing continued, it could not have been a bloody battle, and not much to the honour of civilized Americans. The excuse made for forcing the Blackfeet into battle is, that if they had come upon a small party of trappers, they would have butchered them, and seized upon the plunder. If heathen Blackfeet would have done so, is this an apology for civilized white men to render evil for evil? What a noble opportunity there was for white men calling themselves Christians to have set an example of humanity!

When the night drew near, the hunters retired to their encampment at the place of rendezvous, and the Indians made their escape. Thus the famous

battle of Pierre's Hole began and ended.*

VOLCANIC CHASM.

Had worship this evening with the chiefs, and as many as could assemble in one of their lodges, and explained to them the ten commandments—and after showing them their sins by their transgression of God's holy law, pointed them to the Saviour, and endeavoured to make them understand the way of salvation. My method of instructing them was to give to the first chief the first commandment, by reciting it, until he could repeat it; and the second commandment to another chief in the same way, and so on through the ten, with directions for them to retain what was given to each, and to teach them to their people; and the same manner was pursued with other parts of Divine truth; informing them, that at our next assembling, I should examine them, to see if they rightly understood and retained what I committed to each one. And on examination, in no case did I find more than one material mistake. I also found that they took much pains in communicating Divine instruction one to another.

In this place, I parted with Captain Bridger and his party, who went northwest into the mountains to their hunting ground, but ground which the Blackfeet claim, and for which they will contend. The first chief of the Flatheads and his family, with a few others of his people,

* Since my return, I have seen an account of this battle, written by a graphic hand, representing the Indians as having entrenched themselves in a swamp, so densely wooded as to be almost impenetrable; and there they kept the trappers at bay, until they were reinforced from rendezvous. When the Blackfeet saw the whole valley alive with horsemen rushing to the field of action, they withdrew into the dark tangled wood. When the leaders of the several hunting parties came into the field, they urged their men to enter the swamp, but they hung back in awe of the dismal horrors of the place, regarding it as impenetrable and full of danger. But the leaders would not be turned from their purpose—made their wills, appointed their executors—grasped their rifles, and urged their way through the woods. A brisk fire was opened, and the Blackfeet were completely overmatched, but would not leave their fort, nor offer to surrender. The numerous veteran mountaineers, well equipped, did not storm the breastwork, even when the Blackfeet had spent their powder and balls, but only kept up the bloody battle by occasional firing during the day. The Blackfeet in the night effected their retreat; and the brave mountaineers assembled their forces in the morning, and entered the fort without opposition.

With those who have seen the field of battle, the glowing description, drawn out in long detail, lessens its interest; for although I saw it, yet I did not see the dense woods, nor a swamp of any magnitude any where near.

went with Captain Bridger that they might continue within the range of buffalo through the coming winter.

The Nez Percés, and with them the Flatheads, with whom I go, take a northwest direction for Salmon River, beyond which is their country. Our encampment for the sabbath was well chosen for safety against any war parties of Blackfeet Indians, near a small stream of water which runs through a volcanic chasm. We had passed this, which is more than one hundred feet deep, and in most places perpendicular, and encamped on the west side of the chasm, with a narrow strip of wood around on every other side. Here was a passage made for the water by fire. The courses, which are formed for the rivers, as forcibly prove the creating and the directing hand of God, as the design manifested in the organic part of creation; and I would as unwillingly account for the positions of mountains, and valleys, and the channels of rivers, by natural phenomena, without including the power and design of God, as for the formation of plants and animals. It is true, there is more minute and curious organization in the one than there is in the other, but in both the wisdom and power of God are manifest. Took much satisfaction in reading the epistle to the Hebrews to-day, and especially the part which explains the priesthood of Christ; and also in committing myself and family, the church, and the world of mankind, to God. It was pleasant to reflect on the promises, that the kingdoms of this world shall become the kingdoms of the Lord, and of his Christ, and he shall reign for ever; and the time will come, when all shall know the Lord, and God shall be merciful to their unrighteousness, and their sins and iniquities he will remember no more.

Monday, 31st.—While the Indians were packing and preparing to leave this encampment, I went and examined this volcanic chasm. It is of great length, at least several miles, and narrow, considering its depth; formed with basalt in columns in many places, and in others of amygdaloid. Found many large and interesting specimens of pure obsidian, or volcanic glass, much lava and vitrified stones. I took some small specimens. In the vicinity around, there was clink stone in great abundance, which, when struck by the horses' hoofs, gave a me-

tallic sound very audibly. The soil is black, and appears to be formed of decomposed lava, and is covered with very nutritious grass.

DANGERS OF YOUNG MEN.—No. II.

MY YOUNG FRIEND,—The evils which you can bring on yourself and others, have already been exhibited. See pages 8—12. You can ruin your health, your pecuniary interests and prospects, your intellect, your conscience, your reputation, your affections, and your opportunity of salvation by the Gospel. You can become an occasion of grief and anguish to your parents; you can tarnish the honours, and spoil the happiness of your whole family; you can become a moral nuisance to society; you can act a part towards the destruction of all our civil and benevolent institutions; you can become accessory to the everlasting perdition of souls. What an appalling catalogue of evils for one sinner to accomplish! *Oh! how expensive is sin!* For the sake of a few short-lived gratifications of lust, pride, and vanity, you can destroy all your fair possibilities of good, overwhelm yourself in temporal and everlasting ruin, and spread desolation, lamentation, and woe all around you.

And here are three considerations of great weight and solemnity. The first is, that to do yourself and others all this harm, is no hard and difficult task. It is easy. The way of transgressors is indeed hard, inasmuch as they have to resist strong convictions of duty, and suffer severe consequences; but all history and experience declare that the way to ruin is the *downhill way*, and that it is in this view exceedingly natural and easy to pursue it. The second consideration is, that the way of ruin is insidious. It decoys and deceives. It is entered upon with small and almost imperceptible beginnings; no young man ever dreams where he is going, when he first sets out in it. If he is at any time warned of the deceptive character, and progressive stages of sin, he is ready to reply, "Is thy servant a dog, that he should do this thing?" He sees not the end from the beginning. The third consideration is, that very many *do actually go* the way of ruin. This is an awful fact; it cannot be controverted. It is computed that more than half the young men in our cities go, by a short and desperate course, to destruction. On every side of

us, the fields are white with the bones of the dead, who have fallen from the ranks of our young men; and a voice from eternity admonishes us that ruined souls are constantly thronging the dark and forbidden way of sin, down to the chambers of eternal misery.

These fearful facts are sufficient, it would seem, to enforce upon you the admonition to be "sober-minded," and to fear lest, a promise of good being left you and superior opportunities to secure it, you should disregard them, and inflict upon yourself all the plagues written in the book of God. And are they not sufficient to put you upon your guard against those who would persuade you that all is safe—that there is little or no danger of your ruin; those who cry, "Peace, peace," to you, though you walk after the imaginations of your own heart? How many there are who, with a fair exterior, and a smiling face, take an infernal pleasure in decoying young men to ruin!—"Who knowing the judgment of God, that they which commit such things are worthy of death, not only do the same, but have pleasure in those that do them." Rom. i. 32.

Nay, even worse than this. Many a corrupter and destroyer of youth takes pleasure in decoying them into wicked deeds, which, from motives of prudence, he would not himself commit. He sits behind the scene, and looks forth with satanic pleasure upon the work of ruin which he is accomplishing! Do you doubt this? Do you think I overdraw the fact? Do you say, in the artless and unsuspecting simplicity of youth, Surely human nature was never so fallen and base as this? I tell you, young man, it is what my own eyes have seen; and happy will it be for you, if you do not experience something of the fruits of it in the sacrifice of your own character.

Now are not all these facts, so many and so appalling, sufficient to shield those from the charge of fanaticism, who discover an earnest zeal to save young men from ruin? Are they not sufficient to convince you that your danger is *real* and *great*? Your feet stand on slippery places, and fiery billows roll beneath. A parental admonition disregarded, some slight indulgence, even one incautious step, may occasion your feet to slide, and urge you onward in the downward way; so that nothing will be able to arrest your descent, till you plunge into the abyss!

Do you not then need to be sustained and protected by a higher power than yourself? Do you not need some hold upon the grace of God? This is your only perfect security, even from temporal ruin. Consider this, consider it well; lest, "thou mourn at the last when thy flesh and thy body are consumed, and say, How have I hated instruction, and my heart despised reproof; and have not obeyed the voice of my teachers, nor inclined mine ear to them, that instructed me!" Prov. v. 11—13.

But I have not done with this subject. The perils of which I have spoken are, in a measure, common to both sexes and to all ages. In respect to young men in particular, there are *peculiar* and great exposures and facilities to ruin themselves and others, which must now be noticed.

You are *young*. You have not the wisdom of age and experience to guide you. You are *ardent*. All your animal as well as social and moral nature is highly susceptible. You have an impatient desire for present indulgences. This blinds you to future interests, and closes your ears to the voice of superior and Divine wisdom. To all these vulnerable points the adversary addresses himself with unceasing activity, now enticing to sensual indulgences, now sapping the virtuous principles instilled in childhood, now presenting false images of excellence, now perverting the instructions and admonitions of God. How *peculiarly* successful are these addresses liable to be in the period of youth; when religion, the only safe guide, has yet found no place in the soul, and habits are forming under the plastic agency of circumstances! when judgment is immature, and experience wanting! when all the wheels of life run briskly in unguided motion; and hope is high and often romantic, and imagination lively, and passion strong, and desire impatient, and only the sweet and not the bitter of sin is yet tasted—Oh! how perilous is this period!

Then there is the "*carnal mind*," which is "enmity against God," which loves not the Bible, loves not the service of the Most High, loves not the society and pursuits of good men; which is averse to prayer, and averse to Christian duty; which is often ashamed of Christ, too great a coward to confess him, in league with his enemies, and prizing their smile above the favour, and dread-

ing their sneer above the wrath of Almighty God!

These are some of the *internal* exposures of irreligious youth. Look now at your circumstances. Many young men, especially in the city, are *away from home*. The salutary restraints of the parental roof are removed from you. Perhaps your only home is one where you realize little of the virtuous influence and pure pleasures of that social fireside, at which parents, brothers, and sisters sit down together, and pass their evenings in reading and conversation, and the interchange of thoughts and feelings, calculated to promote domestic virtue, and create a taste for domestic habits and pleasures.

Yet you crave society, and you go out in pursuit of it. And so numerous are the temptations without, especially in the city, that you are strongly tempted to forsake the fireside, even if you are favoured with one, and to go abroad continually. And what is the consequence? Inevitably it is mental dissipation—a state of mind most hostile to intellectual growth, virtuous habits, success in business, and to religion. But what do you find in your evening excursions? Let any observer walk the streets, enter the shops, visit the haunts of vice in our large cities, and he may see what you find. Every avenue to a fallen and depraved heart is entered; every animal appetite and passion is assailed with temptation. A shilling a day spent in indulgence is eighteen pounds a year from the purse of the inconsiderate youth, hundreds from the health and energy of his mind and body, and a thousand-fold more from his future character and prospects.

Now comes the *theatre*. With a tongue of eloquence,

"She pleads for all the joys she brings,
And gives a fair pretence."

He cannot resist the temptation. He must go at least once. But does this suffice? In most instances, he is more desirous of going the second time than he was the first; and the passion grows by indulgence. "Well," says he, shrugging up his shoulders, "what means all this superstition? Was I not made to enjoy? Is it not perfectly natural and right that I should rejoice in the days of my youth, and let my heart cheer me in the days of my youth, and walk in the ways of my heart, and in the sight of my eyes? And as to the influence of the theatre upon

my character and prospects, do not great and honourable men sometimes attend it? If they can withstand its pernicious influence, cannot I?"

But it does not follow, because men who have risen above the power of being much injured by such indulgences, can sometimes descend, and very foolishly and wickedly, give the theatre their presence, without great apparent detriment to their mortal interests, that a young man, just starting in life, who has his education, his habits, his character, his reputation, his standing, all to obtain—can do it. The theatre has more than a hundred times the power over him that it has over them, and he is more than a hundred times less able to resist it. Some recent statistical facts have demonstrated that a large proportion of young men in our cities, take their first decisive step towards ruin across the threshold of the theatre.

As I was one day walking out for my accustomed exercise, a gentleman passed me in his carriage, and invited me to ride with him. He is a man of wealth and distinction, and of an elevated and pious character. He came to the city when young, without friends, without money, without reputation, without any extrinsic means whatever of getting started in business. Soon after I took a seat with him, two young men of dissipated air, with cigars in their mouths, dashed furiously past us in a chaise. "There," said he, "are two young men going fast to ruin." This incident turned our conversation upon the exposures and the ruin of young men. He remarked that most of the young men who came to live in Boston, (America,) at the time he did, had already gone to ruin. I told him that the interest which I felt in them prompted the inquiry, How it came to pass that *he* escaped, and by what means he had succeeded so well in life?

He replied, that when he came to the city, he laid down some rules, which he had stedfastly observed. Among them were the following:—That he would always attend public worship on the Sabbath—That he would never read loose and infidel writings, nor visit infidel meetings—That he would devote a portion of his time to some profitable study—That he would be always diligent and faithful in business, however discouraging things might look—That he would not frequent places of refreshment, unless for neces-

sary food—That he would form no alliance with any individuals, for society or amusement, till he knew them to be virtuous and safe companions—and That he would not go to the *theatre* till he was forty-five years old, when he supposed he should be above the reach of any injury from that source. Long before he reached that age, he became a pious man, and of course he now finds higher sources of pleasure than the theatre—a place which he never visited. Another youth, who came to the city at the same time, and from the same place with him, took lodgings at a house with some theatre-going young men—was prevailed upon to go for once—then again—and again; became loose in his principles and habits; one wrong step led on to another, until he went headlong to ruin, and found an infamous grave! And this, he remarked, had been the sad history of many who entered on and began their career in life with him.

The evils to which theatre-going will expose you are numerous: some of them are obvious. It is an expense of *money*, which no young man can well afford. Hence individuals have thus sometimes been fatally tempted to obtain means in an unlawful way, perhaps by defrauding, or by purloining from their employers, in order to support this indulgence. It generates a feverish imagination, such as destroys a right balance of character. It helps to create in the mind an ideal world, and to beget impatience of the dull round of sober industrious life. It hardens the heart against religion, inasmuch that a theatre-going man never becomes religious, unless he is persuaded to abandon that indulgence. It kindles up the lower and baser passions, and creates a constant hankering for their indulgence. Through the power of the morbid appetites and ungovernable desires which it produces, it often urges on to licentious conduct. A theatre-going youth is almost sure to fall a victim to licentiousness.

There are "the lips of the strange woman; they drop as an honey-comb, and her mouth is smoother than oil. But her end is bitter as wormwood, sharp as a two edged sword. Her feet go down to death; her steps take hold on hell." Yet there is another voice, the voice of God, of reason, of conscience, calling with trumpet-tongue, "Enter not into the path of the wicked, and go not in the way of evil men. Avoid it, pass not by it, turn from it, and pass

away. For they sleep not, except they have done mischief; and their sleep is taken away unless they cause some to fall." The serpent's coils, the viper's fangs, infamy, ruin, and the curse of God are there.

The young man hesitates, fears, turns away, and is almost a conqueror. But his vile imagination, heated in the theatre, and stimulated by wine and cordials, resumes its office, and again entices him to walk in the ways of his heart, and in the sight of his eyes. At length passion gains the ascendancy; it proves too strong for conscience and the voice of God. He consents—yields—falls a victim! "For at the window of my house I looked through my casement, and beheld among the simple ones, I discerned among the youths, a young man void of understanding, passing through the street near her corner; and he went the way to her house, in the twilight, in the evening, in the black and dark night: and, behold, there met him a woman with the attire of an harlot and subtil of heart. —(Her feet abide not in her house. Now she is without, now in the streets, and lieth in wait at every corner.)—With her much fair speech she caused him to yield, with the flattering of her lips she forced him. He goeth after her straightway, as an ox goeth to the slaughter, or as a fool to the correction of the stocks; till a dart strike through his liver; as a bird hasteth to the snare, and knoweth not that it is for its life.—For she hath cast down many wounded: yea, many strong men have been slain by her. Her house is the way to hell, going down to the chambers of death!" These pit-falls, these gates opening into hell, are lurking in almost every nook and alley of our cities and towns to destroy young men; and oh, what disclosures will the day of judgment make, respecting both those who open and those who enter them! For there will be "weeping, and wailing, and gnashing of teeth!"

Next come *gambling and drunkenness*. Not perhaps the gambling which stakes all and more than all upon a single throw, nor the drunkenness which lies upon the road or the pavement in open day. All sense of prudence, honour, character has not gone yet; but it is fast going. The secret sins of the heart may be housed and nourished there through a long life, in connexion with a fair and honourable exterior, if they are never

permitted to break forth into any open act which renders their subject odious to society; but the moment they do this, it is as if a mill-dam gave way. All the iniquities of the heart then come forth with surprising rapidity and resistless power. Once break down a young man's sense of reputation, let him feel that his character and standing among men are lost, and how rapid are his subsequent steps to ruin! One publicly condemned vice seldom lives long alone. The gambler will drink, and the drunkard will gamble if he can. The gambler is almost always a theatre-going man, a rake and seducer, a scoffer at religion and profaner of the sabbath; and the man who will seduce virtue and scoff at religion, will gamble and defraud if he has a chance, and knows how.

The young man, therefore, who has taken any of the leading steps in vice, and secured himself in it, may be expected to take any or all the others, as passion or circumstances shall dictate. He has broken the bonds of restraint asunder, and cast away its cords from him. Need I descend to particulars respecting the last throes and struggles of vice, terminating in an early and infamous grave, and a ruined eternity?

This is but a feeble sketch, a rude outline of the temptations which beset all, and of the ruin which overtakes many of the young men of our cities and towns. The filling up of the picture, together with the flesh and colouring of real life, would create an image too frightful to behold. We are accustomed to see only a part at a time; the impression is thus weakened and adapted to our endurance. I forbear to exhibit the whole picture, I cannot find it in my heart to lacerate the sensibilities of my reader, by drawing the curtain entirely aside, entering quite into the secret place of abomination, and presenting a full-length portrait of what is there.

But this is not all. Far from it. There are two kinds and degrees of ruin. The first is that which a man experiences when he falls a victim to those vices which condemn him among his fellow-men, cast him down from society, and consign him to destruction upon earth. The second is that which he experiences when, after a life of impiety, he is overtaken with the more solemn and fearful retributions of eternity. If the first overtakes you, the second will, of course; but you may escape the first

and yet perish by the second. You are by far the more in danger of the latter alone; for temporal perils are the more obvious and tangible; the retributions of eternity are out of sight, and by many sensual minds disbelieved and even ridiculed; the vices condemned on earth afford no respite, but bring speedy execution; and the selfish and lax morality of men is very prone to laud the individual who promotes their temporal interest, however he may violate other and higher obligations.

Suppose, then, that you escape the contagion of vice, surmount the more gross temptations which beset your lower nature, and allow some superior selfish passion to have the dominion over you—the passion for wealth, honour, rank, power, office, glory. It is more prudent, looks higher and farther than the baser sensual passions which society condemns, but it violates infinite and everlasting obligations, it robs the soul of good, and God of his glory, and it directly opposes the end for which you were made. Controlled by this, you walk not by the law of God, but by the lustings of a selfish heart, and the imaginations of a carnal and earthly mind. You look forward to a prosperous business, a high rank, a fine house, a bright and promising family, a plentiful and honourable manhood, and perhaps also to other distinctions, as the chief good, the portion of your soul. The God in whose hands your breath is, and whose are all your ways, you do not glorify. To the God who made you, to the Saviour who shed his blood for you, to the kingdom of righteousness, to the cause of human salvation, you live not. You are living supremely, though prudentially, to yourself. Destitute of piety towards God, possessing no higher character than mere worldly morality, you have no portion above, no treasure in heaven. You have all your good things here.

Now, in some respects, it is more difficult to convince you of your error, than it is the immoral youth. For we can show by ocular evidence that immorality tends to ruin, even in this life; whereas the perdition of the moral yet irreligious young man, such as the youth in the gospel, will not appear till the judgment day. It lies in eternity, and hence demands an active faith in the principles and truths of the gospel. The danger is, that you will continue to neglect God,

wrap yourself in a mantle of self-righteousness, cast aside all concern about eternity, and be satisfied to take the world for your portion.

How difficult is it to penetrate your mind with the motives of eternity! You perhaps hear the gospel preached on the sabbath! but here are only occasional admonitions, whereas the influence of the world is a continual dropping through the whole week. Worldly motives are before your mind for six days, while the motives of eternity are present but on one. And then also sceptical views, more soothing and comforting, are sometimes thrust before you; and if you do not venture at once fully to admit them, yet they insidiously exert so much influence upon your mind as greatly to paralyze the power of truth. "It may be so," you say. "At least I am willing to keep clear of fanaticism."

Then there is the influence of your companions, to whom you feel strongly committed; a false shame; a dread of appearing in any place of a known religious character; a shyness towards the ministers of truth, and towards all religious people; a disposition to resist conviction and to postpone present duty, and a thousand things of this sort, in addition to the natural aversion of your mind to religion, to hold you back from the Saviour, and to chain you to the world, even when under the most urgent calls of God, and strivings of his Spirit.

If you have pious parents at a distance, you perhaps receive affectionate letters from them, warning you of your danger, and urging upon you the immediate and solemn claims of religion. A father's admonitions, or a mother's entreaties, sometimes move you; but you pacify your conscience with the resolution that you will at least pursue an honourable course, and do nothing to bring your parents to shame.

Weeks, months, years roll on. The world is steadily gaining ascendancy over you; your early religious instructions are losing their power. Sin is growing stronger, conscience less active, your heart harder and more determined in its way. God is becoming more displeased, his Spirit more grieved, heaven more distant. The moral gulf between you and the sovereign and supreme Good is growing deeper, and the unchanging retributions of eternity are approaching.

I have spoken of your dangers; but

do not suppose that you are a helpless creature, cast upon the mercy of exposures which you cannot avoid, to be only pitied if you perish. Far from it. You can see your dangers, and avoid them. There is a way of deliverance—hope—salvation. And God has done enough for your salvation; all heaven will vindicate his conduct towards you. He has thrown the light of eternal truth upon your path; he has warned you; he has commanded and invited you; he has given you sabbaths and the gospel, and many Christian sympathies and prayers; he has shown you your duty over and over again; he has spread out heaven with its glorious joys on the one hand, and hell with its darkness and woes on the other; he has informed you that now is the time to shun the one, and to secure the other, and warned you of the awful and irretrievable consequences of delay.

Against all this, have you hitherto sinned. And still has God borne with you. Will you then say, that he has not done all that was necessary to save you, had you but hearkened to his voice? Is it not enough to break your heart, to think how long he has forborne—against how much goodness you have rebelled—against how much light and love you have sinned?

I cannot believe that you will intentionally trifle with these remarks, or impute them to a mistaken zeal; but I do seriously fear, dear youth, that you will pass them by with only that slight and momentary attention which hardens the heart. I beseech you not to do it. You may think little of all this now. In the gay season of youth, full of health and promise, with a long life in prospect; running the giddy round of fashionable pleasures, countenanced by the example of others; with a flattering world before your eyes, and eternity out of sight—you can easily forget what vast and sacred obligations you are violating, and what a fearful account you are making up for a future day.

But be admonished, you cannot always forget! A change is approaching—a judgment is at hand! The bustle of business, the fair promises of the future, the giddy rounds of pleasure, the thoughtless companions, the flatteries of the world, will all pass away, and leave not a wreck behind! Even in the midst of life, “at such an hour as you think not,” death’s awful bereavements are at your door:

Of all these things he will strip you, and hand you over a naked sinner to the judgment. If he finds you unprepared, he will deliver you up to the insufferable retributions of a remorseful conscience, an offended God, a rejected Saviour, and an eternity of misery!—*Hubbard Winslow.*

UNCLE BARNABY'S SENTIMENTS ABOUT NOBILITY.

In the days of my youth, it was always reckoned among the chief of my holiday gratifications, to spend a week at the house of my uncle Barnaby, where I met my cousin Frank. Frank was more than a year older than myself; and, being placed at a public school, much farther advanced in a knowledge of Greek and Latin, and also of the customs and manners of men. He was nevertheless kind-hearted, generous, and affectionate, and always treated me in such a manner as won my confidence, as well as commanded my respect. This is not uniformly the conduct of school-boys towards those whom they consider as their inferiors. As to my uncle Barnaby, he was a worthy benevolent old gentleman, old-fashioned in some of his customs and opinions, but always good-humoured and kind. He was an early riser; active, neat, and persevering in his habits; always seeming to have something useful to do, and to be intent on doing it, yet without bustle or confusion. He had a good house; a select and valuable library, a complete philosophical apparatus, pleasant grounds, a well cultivated garden, a productive orchard—oh the apples and walnuts that I have fetched down from the topmost boughs! and the rich clusters that were brought in from the grapery! Then, too, uncle Barnaby was much respected in the neighbourhood; every body seemed to look up to him. The rich consulted him about their estates, and made him trustee for their children; the societies were all anxious to have him for their treasurer, or, at least, a leading man on their committees; the perplexed and discouraged sought his advice and assistance; when quarrels arose, it was generally reckoned the part of wisdom and peace to solicit his arbitration; and the poor, for miles round, looked up to him as their benefactor and their friend. Walk which way he would, every one who met him touched his hat, or dropped her curtesy, and said, “Good day, your ho-

nour." I should add, that Uncle Barnaby was a religious man, one whose conduct was regulated by habitual reverence to the will of God, and a desire to live to his glory. He loved the Bible and prayer, and the public ordinances of religion. He was constant in his attendance on all these sacred privileges, and their influence was constantly seen in the regulation of his temper and conduct. He ruled his household in the fear of God, and rendered it evident to all that religion made him happy. As a benevolent man, he desired to extend to others that which was the source of his own felicity. All his conduct, and plans, and exertions in the cause of religion, tended to impress on the minds of those around the affectionate invitation, "Come with me, and I will do you good." It cannot be wondered at, then, that a school-boy felt great delight in paying a visit to uncle Barnaby, and esteemed it an honour to be connected with such a relative.

The sentiments of the man have not varied from those of the school-boy; only as there has been a growing capability of discerning and appreciating the intrinsic excellences of character in one who was at first loved chiefly on account of the cheerful kindness he manifested, and the pleasure he imparted. Many of uncle Barnaby's conversations and remarks remain on my mind to this present day, and are often confirmed by my own observation.

I remember walking with him through a fine park in our neighbourhood, to call on one of his tenants: just on the edge of the park was a public-house, called the Cockpit, as the cruel gambling sport of cock-fighting was carried on there. As we passed by, two skinny, meagre-looking lads dismounted each from a fine spirited horse, the ostler, landlord, and landlady all crowding to offer their services in the most obsequious manner, and slipping in at every third or fourth word, "My Lord," or, "Your Lordship." "I suppose," said cousin Frank, "these are two young noblemen." "Yes," replied my uncle, "the sons of the Marquis of —, of — Park." We had scarcely turned the corner, before their young lordships had entered on familiar conversation with their attendants, laughing at the sport of a past day, to which they referred, discussing the respective merits, and betting upon the success of the poor

feathered combatants, who were to afford them new entertainment; and interlarding their discourse with certain low and profane expressions. "Noblemen!" thought I to myself, "I wonder at their degrading themselves by such meanness: profanity, gambling, and low familiarity are any thing but noble; at least such is my father's opinion, and I dare say he is right."

Not long after we had passed away from the cock-pit, and were crossing a meadow, a tall soldier made his appearance, placed one hand on the top of a five-barred gate, threw himself over without any seeming effort, and instantly resumed his quick yet stately march towards us. We were all struck with his fine, athletic, well-proportioned form, and graceful movements.

"What a noble fellow!" exclaimed my cousin Frank, "and a Waterloo hero too! He wears the medal of honour."

"Yes," replied my uncle, "it is said that in that tremendous conflict he fought like a lion, and cut down five men with his own hand, besides taking several prisoners of distinction."

I shuddered at the account, for I always had an instinctive horror of war; and could not bring myself to associate the idea of nobleness with that of taking away the lives of men.

In the course of our ramble the words "noble" or "nobility" again occurred more than once. My uncle directed us to a handsome mansion, in a very dilapidated state, most of the apartments being shut up, and the rest only occupied by an old man and woman, appointed to take care of the place; the noble proprietor having squandered his property on the race-course, and at the gaming-table, and compelled himself with his family to retreat from the abode of his ancestors, and to live for retrenchment in obscurity on the continent.

Presently after, we met a poor man, walking with crutches, and who appeared to be in very bad health. My uncle accosted him very kindly, made particular inquiries after his wife and family; and drew him aside for a moment, I suspect, from the poor fellow's manner at parting, to make him a present.

"Has he met with an accident?" asked my cousin Frank.

"His lameness," replied my uncle, "has arisen from a noble effort to save the life of a fellow creature. Some months ago, a farm-house was burned to the ground.

The farmer was from home when the fire happened; and as but little help was at hand, and there were few persons who knew how to render assistance, the property was entirely consumed; and the women and children were with difficulty rescued from destruction, chiefly by the exertions of the man we just met. As the terrified children gathered round their mother, one of them exclaimed, 'Where is old Nanny?' This brought to the recollection of the bystanders that one inmate of the family was missing—an aged relative who assisted in taking care of the children. While all regretted that the poor old creature should so miserably perish, all agreed, as the staircase was already in flames, that it was utterly impossible to rescue her. This one noble fellow, however, resolved to take his life in his hand, and make the attempt. No entreaties could deter him; he rushed forward regardless of danger,—and yet not exactly so, for he adopted every prudent precaution that time and circumstances would allow, to defend himself both against flames and suffocation: he reached the chamber where the poor creature was, and bore her in safety to the window, whence she was removed unhurt. Her deliverer, however, had received a violent blow on his leg, which in its effects proved even worse than a fracture. He has ever since been a sufferer, and, in all probability, will, to the end of life, feel the effects of his generous enterprize. But he considers his sufferings highly compensated in the success that crowned his endeavour, and the gratitude of those on whose behalf he nobly ventured."

"It was a noble action," said cousin Frank; "the man ought to receive a medal or premium from some of the societies. I don't know that such a mark of honour would add to his satisfaction; but it is due to his merit."

We proceeded on our way, noticing as we passed, the various scenes of nature, the instincts and habits of the animal tribes, or the features of human character which presented themselves to our view. Our minds are sometimes more disposed to investigate the minute; at others, more inclined to dwell on the majestic. The latter tone of feeling seemed to prevail on this occasion. The noble river, and the stately oak, with its massive trunk and wide-spreading branches, enriched and mellowed with the tints of autumn, were more in unison

with our feelings than the busy pismires at its feet. And yet these were not altogether overlooked; for, as my uncle Barnaby observed, when we expressed our warm admiration of the noble tree that stood before us, "Its nobleness is displayed not merely in its stately trunk, its expanding branches, and its beautifully varied tints, but also in the numerous creatures that seek shelter at its base, or feed on its fruits, or make their nests among its branches."

The titled gamblers, the athletic soldier, the courageous and kind-hearted labourer, the spreading oak, all presented to my mind different, and somewhat confused ideas of the epithet "noble;" and on reaching home, I hastened to the library, hoping to obtain from the explanations of Dr. Johnson, some more definite sense of its import. My uncle came in, and found me with my head on my hand, and the volume on my knee open at the words—"nobility," "noble," "nobleman," "nobleness." As I had not found all the satisfaction I desired, "Uncle," said I, "I wish you would tell me what you really call a noble man: I wish to have your own sentiments on the subject, I don't want any more dictionary explanations."

"Well," said my uncle, "do not let us reject the dictionary altogether, but take its definitions as far as they go, and add any ideas or explanations of our own that may present themselves." At my uncle's desire, I read the several definitions of "noble:"—

1. Of an ancient and splendid family.
2. Exalted to a rank above commonality.
3. Great, worthy, illustrious.
4. Exalted, elevated, sublime.
5. Magnificent, stately.
6. Free, generous, liberal.
7. Principal, capital.

My uncle remarked, "As you ask me what I mean by a noble *man*, we may drop some of these definitions, and modify others. The seventh relates not to man himself, but to the vital or most important parts of the human frame, or the chief cities of an empire, or to the principal portions of any given whole. The fourth is yet more strictly applicable to the stupendous works of creation and the discoveries of revelation, than to human sentiments and actions, which can be "exalted, elevated, and sublime," only in a very inferior and imperfect sense. The fifth we more frequently apply to

objects we behold, especially to such as are the productions of human labour and art; we speak of a magnificent cathedral or palace, a stately dome, arch, or tower. But as far as the word noble is applied to man, it strikes me to signify the possession of superiority; corporeal, intellectual, circumstantial, moral, or prospective. Some of these distinctions are extrinsic and adventitious, and do not necessarily combine the elements of moral greatness, nor are they essential to it—a man may be noble without them; yet they are not to be despised, for when superadded to intellectual and moral qualifications, the happy combination confers on its possessor additional lustre, power, and influence. To begin with a vigorous bodily frame and sound health: these are not absolute conditions of greatness of soul, yet it would be wrong to affirm that they have no affinity with it. They are certainly favourable to the growth and exercise of magnanimous sentiments; and though we have seen some signal instances in which mind has exerted a noble energy in surmounting all the disadvantages of a feeble and diseased body, and some lamentable instances in which exterior symmetry and grace of person have been associated with feebleness of mind and depravity of heart,—in general we look for a correspondence between the inner and the outer man, and feel that there is an unfitness when that correspondence is wanting. We feel something of the same kind of disparity when a very diminutive or feeble body is connected with high-sounding titles.”

“Yes,” said Frank, “I could scarcely refrain from laughing at those two little skinny, meagre-looking striplings, mounted on their noble hunters, and addressed at every turn, ‘My lord,’ and, ‘Your lordship.’ I should have been much pleased had their conversation been characterized by lofty and noble sentiments, as much as I was disgusted by its meanness, vulgarity, and profanity, which seemed quite a libel upon their high birth.”

“And the handsome soldier,” I observed, “whose manly form and graceful movements we so much admired,—would it not have been more agreeable to our feelings, and more accordant with our sense of the fitness of things, to know that his strength and courage had been employed in saving men’s lives, rather than in destroying them?”

“I think it would,” replied my uncle;

“and on this principle, taking a single action, the poor labourer who hazarded his life and sacrificed his health to save a fellow-creature, is, in my esteem, more noble than the titled cockfighter, or the courageous soldier.”

“But suppose, uncle, he had been as high-born as the young lords, and as tall and vigorous as the soldier, and at the same time as generous and benevolent as he has proved himself to be?”

UNCLE. I am happy to say I know some individuals who combine all these distinctions; and the others to which I have alluded, as coming under the description of “noble,” and I reckon them noble indeed.

FRANK. You spoke of intellectual superiority, uncle, as belonging to a noble character, but I do not think great talents and nobleness always go together. One of the cleverest fellows in our school (indeed Dr. — has often said he has talents enough for two) does not acquit himself in so honourable a manner as some who are far his inferiors in genius.

UNCLE. Very likely: the intellectual superiority to which I refer, is essentially different from genius, which, in its common acceptance, means such a decided bent for some one pursuit as enables a man to attain his object in it with little or no labour. This is often the companion of great inequality, and incompleteness of character. The intellectual superiority which I claim for my noble man comprehends a capacious mind, capable of admitting truth in its various aspects, and bearings, and relations to general principles; with a lively perception and ardent relish for what is beautiful, sublime, and good. He must be neither a mere dry speculative reasoner, nor a sentimental enthusiast, but the possessor of a sound judgment and a correct taste. Then to give that mental superiority claim to the character of noble, it must be practical. There is nothing noble in discerning and admiring the good, and yet choosing and following the evil. True nobility of mind will lead to moral superiority. It is utterly at variance with selfishness, sensuality, and malignity. These, however varnished over and dignified with specious names, are unvarying indications of meanness of character. True nobleness can never co-exist with them. Self-control and a generous regard to the claims and interests of others are inseparable from true magnanimity. A noble-minded man cannot but

be benevolent and social too. Without this, great mental energy, will only lead to selfish ambition.

FRANK. I think you are quite right, uncle; but I know some who seem to think that they show their nobility by pursuing their own pleasures in utter disregard of others.

UNCLE. Whatever they may think of themselves, and assume to themselves, I think they are the slaves of a mean and ignoble disposition. Another feature of a noble mind is that of capacity and courage for enterprise, especially benevolent enterprise. As the former qualities will lead the individual to conceive good and great purposes and desires, this will enable him to put them in execution. He will watch his opportunities, select his means, employ his energies, encounter difficulties, endure delays, and surmount opposition, with a steadiness of purpose, a promptitude of perception, a clearness of judgment, a cheerfulness of sacrifice, and a perseverance of exertion truly astonishing to minds of an ordinary sort; which, had a tenth part of his difficulties opposed them, would have relinquished the enterprise in despair. "There is a lion without, I shall be slain in the streets," is their language. Nothing but a conviction of duty, or the overruling operations of Providence, will induce a truly noble mind to relinquish or stop short of the accomplishment of its good purposes.

But then, together with this capacity for action, there is a capability of repose. Some persons are in continual bustle: their lives are a course of purposes eagerly taken up, and ardently pursued, and perhaps quickly forgotten; or, if remembered, the recollection is not followed by permanently beneficial results, but becomes a matter of vain-glorious boasting. There seems to be neither time nor disposition for reflection or for tranquil enjoyment; the accomplishment of one scheme is but the signal for taking up another; and life is passed in a continued whirl. Such persons are the subjects of a restless mental activity, but not the possessors of real greatness. The quietness of a noble mind will discover itself in its readiness to meet dangers in the way of duty; its tranquil resignation under suffering and affliction; and its noiseless manner of doing good. A noble-minded person will be humble, modest, unassuming, and charitable. These dispositions will be called into ex-

ercise by a clear perception of his own utter destitution of merit; his entire obligation to the free and sovereign bestowment of God for whatever superiority he possesses; a consciousness of his numerous defects and failures; a sense of his distance from the attainment of perfection either in purpose, feeling, or action; and a just respect for the claims and merits of others. It will take a benevolent pleasure in their excellence and happiness, put a candid construction on their motives and conduct, and cherish a benevolent regret for their failings and sufferings. There is often greater heroism exercised in the silent endurance of domestic privations and crosses, in the meek uncomplaining suffering of the sick chamber, in the self-denial that furnishes the means of doing good, and in the humility and modesty that conceal the doer, than in the splendid sacrifices of the patriot, or the reckless self-devotion of the warrior on the field of battle.

Amongst the quiet features of true nobleness of soul, we must not overlook, though they are frequently sought for in vain from great pretenders to magnanimity, the capability—the spontaneous readiness to forgive an injury, and to confess a fault. They are the characteristics of a great mind, and should be cultivated by all who aspire after excellence. They will be best acquired by bringing the spirit into new and constant intercourse with the perfect and Divine Pattern of forgiveness and love, the Incarnate Saviour.

To complete a great character, or rather to give vitality to all the elements of greatness, the truly noble man must be a truly religious man.

Whatever is bounded by earth and time must be comparatively mean and grovelling, and whatever is regardless of, or hostile to the nature and claims of Supreme Authority and Excellence, must be rebellious, debased, and impure. Truly to ennoble the immortal spirit of man, it is essential that it should be conversant with objects and themes commensurate with itself in dignity and duration. It must look into eternity with realizing faith. And since, whatever original or acquired advantages man may possess, as his actual condition is that of a sinner, an alien, an enemy to God, the soul must embrace that wonderful plan of mercy and reconciliation which the gospel reveals; must humbly and cordially

receive Christ Jesus, the unspeakable gift of God; must implicitly yield itself to the guidance of the Sacred Spirit, by whose gracious influence alone, what in human nature is dark can be enlightened, what is grovelling raised, and what is polluted purified; the man must become a partaker of the faith that receives the kingdom of God as a little child, that will enable him in true repentance to fall at the feet of a forgiving Father, to submit to his authority and rest in his love, and live in continual intercourse with him. When this course is established and maintained, growing dignity and excellence will adorn the spirit and character; and daily advances will be made in preparation for the inheritance of the saints in light, of which daily anticipations will be cherished.

"When one that holds communion with the skies,
Has filled his urn where those pure waters rise,
And stoops to converse with us meaner things,
'Tis e'en as if an angel shook his wings.
Immortal fragrance fills the circuit wide,
They tell us whence its treasures are supplied."

As uncle Barnaby closed the above quotation, he rose and left the room.

As I mused awhile on his sentiments and his character,

"I'll tell you what, Samuel," said my cousin Frank, "my uncle Barnaby himself is a noble man."

"I think so too," was my reply, "and I wish we could be like him. We must seek such excellences from Him who gives power to them that believe to become the sons of God."

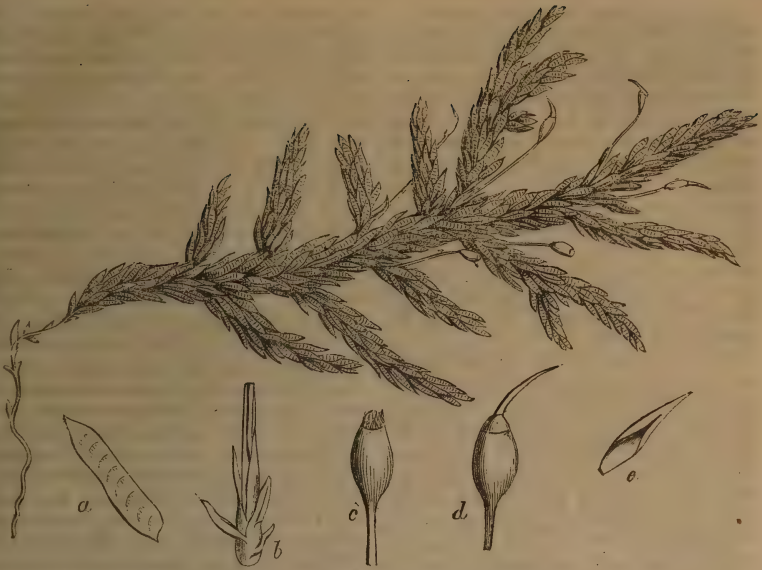
PRIDE.

WHOEVER has paid attention to the manners of the day, must have perceived a remarkable innovation in the use of moral terms, in which we have receded more and more from the spirit of Christianity. Of this the term to denote a lofty sentiment of personal superiority supplies an obvious instance. In the current language of the times, pride is scarcely ever used but in a favourable sense. It will, perhaps, be thought the mere change of a term is of little consequence; but be it remembered, that any remarkable innovation in the use of moral terms betrays a proportionable change in the ideas and feelings they are intended to denote. As pride has been transferred from the list of vices to that of virtues, so humility, as a natural consequence, has been excluded, and is rarely suffered to enter into the praise of a character we wish to commend,

although it was the leading feature in that of the Saviour of the world, and is still the leading characteristic of his religion; while there is no vice, on the contrary, against which the denunciations are so frequent as pride. Our conduct in this instance is certainly rather extraordinary, both in what we have embraced and in what we have rejected; and it will surely be confessed we are somewhat unfortunate in having selected that one as the particular object of approbation which God had already selected as the especial mark at which he aims the thunderbolts of his vengeance.—*R. Hall.*

PROGRESS OF THE GLACIERS.

PROFESSOR Hugi has recently made some interesting experiments and observations upon the movement and rate of progress of the glaciers. In 1829 he noted the position of numerous loose blocks lying on the surface of the lower glacier of the Aar, relative to the fixed rocks at its sides. He also measured the glacier, and erected signal-posts on it. In 1836 he found every thing altered; many of the loose blocks had moved off, and entirely disappeared, along with the ice that supported them. A hut, which he had hastily erected, to shelter himself and his companions, had advanced 2184 feet; two blocks of granite, between which it stood, then eight feet apart, had been separated to a distance of 18 feet, the beams and timbers had fallen in between them, and the nails and pieces of iron, used in fastening them, exhibited not the slightest trace of rust. A mass of granite, containing 26,000 cubic feet, originally buried under the snow of the firn, which was now converted into glacier, had not only been raised to the surface, but was elevated above it, in the air, upon two pedestals, or pillars, of ice; so that a large body of men might have found shelter under it. A signal-post, stuck into a mass of granite, had not only made as great an advance as the hut, but the distance between the two had been increased 760 feet by the expansion of the glacier. The mass of the glacier had grown or increased near the point where it begins to descend 206 feet: lower down there was less augmentation perceptible. The advance of the ice-field of the Mer de Glace is calculated at between 400 and 500 feet yearly, and for eight or ten years past, the mass of the glacier has been sinking and retiring gradually.—*Hand Book of Switzerland.*



Hypnum crispum, (or, as it has been recently called, *Neckerea crispa*.)

a, A leaf showing the transverse wrinkles.
b, Scaly bud, from which a capsule springs.
c, Capsule without the veil, showing the orifice fringed with outer circle of teeth, containing the sporules or seeds.

d, Capsule with the orifice covered by the beaked veil, the pod containing the sporules or seeds.
e, Veil, inner side.

MOSS.

It is a very striking and remarkable phenomenon of the visible creation, that every part of it, so far as is known to us, should be full to overflowing with something in a living or growing state. The earth, the air, and the waters swarm either with animals and animalcula, or with numberless forms of vegetable life; which, though not like ourselves endowed with consciousness, nor, in some points of view, with sensibility, are unquestionably of indispensable importance in the great scheme of universal being, designed and called into existence by the wisdom and power of God.

But, though the fulness of life in the world is so striking as to attract the attention of the most incurious, error and prejudice are too commonly prevalent respecting circumstances of great interest, when well understood, as may here be briefly illustrated. The microscope proves that the waters swarm with animalcula, invisible to the naked eye, and affording so much nourishment to larger animals, that several species, such as the herring, the salmon, and even the whale, seem to require little else for their

subsistence; and hence the food they lived upon was long, and is among many now, an unexplained mystery. The fact of the waters being thus full of life is therefore undeniable; and, by reasoning analogically, it has been concluded, that the same is true of the air, which is consequently affirmed to swarm with invisible insects and other minute creatures.

This is not true, however, of the atmosphere as it is true of the waters. The minute animals which swarm in water are chiefly such as are covered with transparent or translucent crustaceous shells, somewhat similar in composition to those of shrimps or lobsters, and so specifically heavy that they could not float in the air, and consequently could not fill it. But independently of this negative consideration, we can see, when a bright ray of light streams through an apartment, or a shaded corner of a wood or of a garden, that

“The gay motes which people the sunbeams”

show no sign of life, and consist of minute particles of dust, shreds of hair, down, cotton, wool, and similar inanimate

matters, swept away from the surfaces of things by the passing breeze. A gnat, a fly, or a bird, may indeed float across this sunbeam; but the occasional appearance of these creatures would not entitle us to say that the air swarmed with them, as the waters are proved to swarm with animalcula. The grand test of the microscope, also applied to the mote-peopled sunbeam, or to any other portion of the atmosphere, invariably proves that no animalcula invisible to the naked eye exist there, and that, so far as animal life is concerned, the air is barren and blank, with the exception of such as are obvious and visible.

If this be true of the minute insects and animalcula themselves, it holds still more strongly of their eggs, which have also been asserted to float about in the air, and thus to spread blight and devastation over fields, orchards, and gardens. Now it has recently been shown, by the profound and accurate researches of M. Ehrenberg, of Berlin, that the eggs of minute insects and animalcula are, in a very extraordinary degree, proportionally large in comparison with the mothers that lay them; and we know that all eggs are specifically heavier than the animals which are hatched from them. If, therefore, the insects and animalcula are too heavy to float in the air without the aid of wings, or, as in the case of the spider, without the floating support of a gossamer thread, much less will the still heavier eggs float on the air, or be carried about with the winds.

Now, though all this, contrary to popular opinion and belief, is demonstrably true of minute animalcula and their eggs,—which are not, and cannot, from their weight, be diffused through the air,—it is just the contrary with respect to certain classes of the vegetable creation. Nobody, indeed, ever dreamed of plants, however minute, floating about in the air, living and growing, without root, and non-stationary; though it would be as correct to affirm this of minute plants as of minute animals invisible to the naked eye. But that the seeds of the plants in question are diffused very extensively, and in extraordinary profusion, through most, if not through all parts of the atmosphere hitherto observed, is proved by numerous facts strikingly interesting and remarkable.

The city of Glasgow is chiefly built of a beautifully white freestone, called by geologists the new sandstone of the coal-

measures; and as the great demand for this as a building stone has exhausted the supply near the surface in the immediate vicinity of the city, the quarries have been, in some instances, worked to the depth of from fifty to perhaps two hundred feet. Now the stone which is detached from the very heart of the solid rock at this depth, where it has lain at least since the deluge, might not be supposed to contain seeds capable of vegetating; yet, after houses are built of this stone, the walls, within a few months, and sometimes within a few weeks, exhibit patches and streaks of a green colour, as if they had been painted; and it is worthy of remark, that in spots where water drips or streams down from the eaves or roof, the green becomes deeper and denser, showing that it is either derived from the water, or developed thereby. The celebrated Linnæus described this green paint-looking substance as a species of crow-silk (*Byssus*); but it was afterwards experimentally proved by the German naturalist, Hedwig, and by Mr. James Drummond, now the government botanist at the Swan River, that it is only the first stage of the vegetation of a number of species of common mosses; and that under circumstances favourable to their growth the paint-looking green would acquire leaves, and go on to perfect seeds (*Sporulae*).

We have thus shown that these seeds, or sporules, as botanists call them, must either have been in the stone dug from the heart of the solid rock, or in the rain water that had moistened the wall where the vegetation is observed. We may now bring forward some curious facts to prove that the moss sporules, or seeds, are derived from the rain water, rather than from the stone.

If the moss sporules, or seeds, were in the stone, they would be entirely destroyed by the stone being made red-hot. Now, though the writer is not aware that this experiment has been tried with the Glasgow building-stone, it is tried every day in the similar instance of bricks employed in building, on which also the green paint-like substance arising from the vegetation of mosses makes its appearance, though not so remarkably as on the white stone, owing to circumstances that will afterwards be stated.

In the vicinity of London, and elsewhere, it is one of the commonest circumstances, though it may be overlooked by non-botanical observers, to see the

top of a brick wall that has been built for some time, with a thick vegetation of mosses, such as the wall screw moss (*Tortula muralis*), and the hygrometer moss (*Funaria hygrometrica*), in every stage of growth, from the first speck of vegetation to the full-grown fruit or sporule-bearing plants. Now, before this crop of mosses appeared on the top of the brick wall, the sporules or seeds must have been sown there, as they could not exist in the bricks after they were burned in the kiln. On the sides of the walls the mosses are but sparingly, if at all, seen to grow, because, unlike the soft porous freestone of Glasgow, that readily imbibes water, the bricks are comparatively smooth and hard, and, therefore, it is only on the top of the wall that the seeds or sporules can well lodge till they vegetate. Even on the top of the walls they are observed at first chiefly in small holes or crevices, till the rotting of successive generations of them forms a thin layer of soil, which is annually extended, and affords a still better place for subsequent crops to grow in.

If it should be thought by any that the instance of the moss vegetating on bricks, strong though it be, is not quite conclusive as to their derivation from sporules or seeds floating in the atmosphere, there is a striking fact, and one new to botanists, which is still more conclusive in support of the inference contended for, as shall now be stated.

It must be apparent to all, that the deck of a ship is the last place where any manifestation of vegetable life might be looked for. One might almost as well expect to see plants springing up on the floor of an uncarpeted room, constantly trodden over, and daily swept or washed down. The tar and pitch, also, which are always more or less spread over the deck of a ship, are inimical to vegetable life; the creasote which these contain tending to kill all plants by coagulating their mucilaginous juices, and clogging up the circulation of their sap. Yet, notwithstanding all these unpropitious circumstances, and apparent impossibilities, the universally diffused moss, sporules, or seeds, as readily exhibit their presence, and vegetate in the form of the green paint-looking substance, on the often-paced and daily-scrubbed deck of a ship, in certain cases, as on the stone walls of the houses in Glasgow, and the tops of the brick walls near London. It was necessary to say, "in

certain cases," for the phenomenon does not occur on the decks of all ships, nor at all times. For the purpose of bringing forward the vegetation of the seeds or sporules of moss, moisture and warmth are indispensable, and consequently the vegetation will never be developed in dry, frosty weather. The phenomenon of the vegetation of mosses, accordingly, is seen most strikingly on the decks of ships during the rainy season in the tropical latitudes; and it does not appear to depend in any degree upon the proximity or remoteness of land, but is as profuse at one thousand miles from land as when the ship is in harbour.

Do not, then, these particulars prove beyond all doubt, that the moss seeds or sporules are floating every where in the atmosphere, even a thousand miles from land, and that they are carried down by rains, and lodged on every spot of the earth's surface, ready to spring into vegetation and verdure? Even the barren deserts, there can be little question, would soon be covered with these abundant tiny mosses, were it not that the sand wants the requisite moisture for their germination—a consequence, it would appear, of the original anathema, "Cursed is the ground for thy sake," Gen. iii. 17.

All this, it may be said, is pretty strong proof of the moss sporules being diffused abundantly through the atmosphere; but why not prove their existence there more decidedly, by the aid of the microscope, as is done with respect to the minute insects and animalcula in water? It may be stated, in reply to this, that the experiment, though presenting considerable difficulty, is not impossible, for the sporules might be detected by the microscope in rain water caught before it fell on a wall, or the like. The writer, however, is not aware that any attempt has been made to ascertain this. One of the great difficulties which stand in the way is, the extreme minuteness of the moss sporules, some species of these being described when scattered from the pods, as resembling smoke or vapour; and the non-botanical reader may be referred for an analogous example, to the sporules or seeds of the common puff-ball, which are too fine to be called dust even by illiterate observers.

Another extensive group of plants similar in their manner of diffusion to mosses, but very different in appearance, is known to botanists by the name of

lichens, and some of the species are popularly termed liverwort, stone-raw, cud-bear, and Iceland moss (*Cetraria Islandica*). The sporules of these lichens must be similarly diffused in the atmosphere with those of mosses, if we may draw the inference from their great profusion, and the universality of their dispersion. Lichens do not appear, like mosses, to require any crevice or hole for their sporules to lodge in order to vegetate, for several sorts will fasten upon the smoothest and hardest stones and rocks, and even on the still smoother bark of trees. There are few trees indeed of several years' standing, and still fewer stones and rocks, in exposed situations, whose surfaces are not incrustated and mottled with innumerable lichens, some exhibiting little more than black lines, like small Hebrew characters, (*Epegrapha Hebraica*,) others in broad leather-like patches, and others in tufts, like a bundle of small grey twigs without leaves.

One of the final causes of the profuse dispersion of mosses and lichens appears to be the production of soil for the growth of larger plants. The process of this formation on rocks, stones, and the tops of walls, appears to be the following:—the mosses and lichens which vegetate from sporules, rarely, in the first instance, get beyond the earliest stage of growth before they are starved for want of moisture; and there being no soil for even their very small roots to take hold of, they perish and rot, leaving a barely perceptible layer of decayed vegetable matter, as the beginning of the soil about to be formed. The next sporules which lodge and vegetate on this thin layer of soil have, of course, the advantage of some little earth, scanty though it be, to strike their minute roots into; and, in consequence of this advantage, their growth, though still feeble, is superior to that of the first crop, and when dry weather comes to destroy them, their decayed materials add more than as much again to the first layer of soil that has been formed.

It sometimes requires many generations of vegetating mosses before any of them arrive at mature growth, so as to produce pods of ripe sporules; and in situations which are too dry, they never do arrive at this stage of maturity; but, notwithstanding, they continue to grow and decay, and add to the accumulating soil till a layer is produced of sufficient

depth for grasses and other plants to spring up and take root.

Another apparent final cause of the very general growth of these plants is, to cover portions of ground which would otherwise lie bare and barren. The illustration of this point would require as much space as has already been devoted to the vegetation of mosses and lichens, and it would prove of no less interest in developing the goodness of the all-wise God; but, for the present, room cannot be spared for more than one or two instances.

On the damp banks of ditches, and similar places, there are often vacant spots of earth left, after the other portions of the soil, especially where it is exposed to the sun, are clothed with grass and other herbage. On the bank least exposed to the sun, and even in spots where its rays never come, Hooker's shining

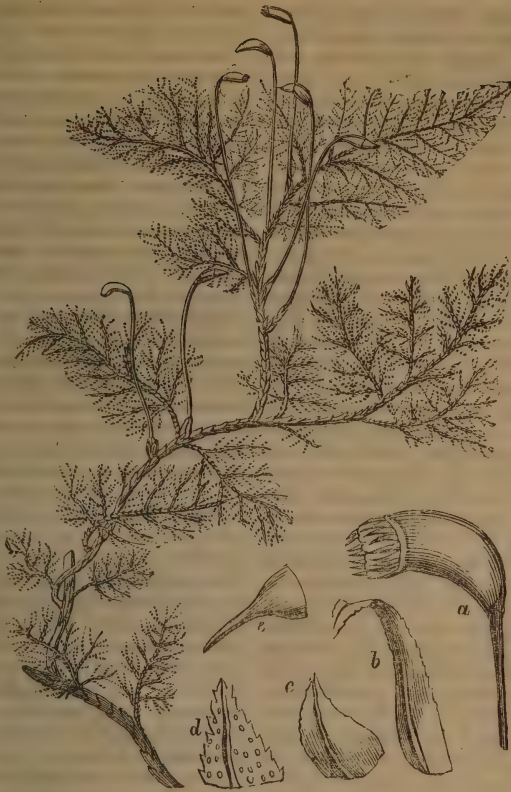


Hookeria lucens.

- a, Plant of the natural size.
- b, Capsule containing the sporules or seeds.
- c, Leaf.
- d, Veil.

moss (*Hookeria lucens*) and Necker's curled moss (*Neckera crispa*) seize upon the vacant spots, and grow most luxuriantly. (See page 57.) In the south of Ireland and in Derbyshire, the writer has seen them under such circumstances, covering considerable patches of the sunless side of a ditch, where hardly any other vegetation could thrive.

In a similar way, the proliferous feather



Hypnum proliferum.

a, Capsule without the veil, showing the orifice, the pod containing the sporules or seeds.

b, c, d, Portions of leaves highly magnified to show the serrated edges.

e, Veil.

moss (*Hypnum proliferum*) grows, in broad patches, in woods and groves covering much ground that, but for this and its congeners, would exhibit nothing besides the naked surface of the earth, and would of course expose the roots of the trees to the drought of summer and the frosts of winter, which are by this means effectually protected.

J. R.

"GOD IS LOVE."

If there be one subject more dear than another to the heart of the Christian, from being the moving cause of the whole scheme of his salvation, it is the love of God. If there be one theme above another, from the conspicuous position the Holy Spirit has assigned to

it in the writings of inspiration, it is the love of God. If there be one attribute of the Divine nature in the exercise of which the Deity feels greater complacency than that of another, it is love. God is love—not only benevolent and beneficent, but he is love in its essence.

Do we ask for its exhibition? Nature, with open volume, stands forth, and displays it. The impress of his goodness is on every production of his hand. In the construction of all his creatures, animate and inanimate, his beneficence shines forth. The spangled firmament of night, and the brilliant orb of day; the atmosphere in which we breathe, and the ground on which we tread, declare its existence; the lofty mountain, and the towering rock; the subterranean mine, and the swelling ocean, contain its exhi-

bitions; the forest and the field, the air and the sea, abound with animate inhabitants, which display its exercise, and universally point out the God of love. But in man, the masterpiece of creation, love shines pre-eminently. His wonderfully formed body, and the regularity of the operations of its complicated machinery, display beneficence, as well as power and wisdom, at once calculated to excite our wonder, admiration, and gratitude. But the body alone is not man; he is not only matter, but spirit—not only substance, but essence. He has a soul, the powers of which declare its Maker to be a God of love. How vast its capacities! How wonderful its comprehensions! At one moment, its attention is drawn to the busy scenes around, the next, riveted on objects in far-distant climes, or wandering amidst floating worlds in infinity of space; now, fixed on the affairs of the passing hour, and then, directed to events long gone by, in the history of the world, or antecedent to the birth of time; now, dwelling on present scenes, and then, anticipating circumstances in the future history of the globe, or subsequent to the present mortal state. How wonderful are the powers of the mind, and how well adapted to promote the happiness of man by the versatility of its resources! How wonderful its conceptions! how exquisite its sensations! how deep its sorrows! how elevated its joys! how bounding its hope! how dejected its despair! how pure its delights! how keen its remorse! how perfect its recollection! how minute its anticipation! We behold here the wisdom, power, and love of Deity! The book of nature, then, clearly intimates that God is love.

We turn to Providence: its instructive pages unfold to us a comprehensive view of the government of the Ruler of the universe. He not only calls his creatures into existence, but opens sources for their continued enjoyment: he not only, at the opening of their being, gives them the breath of life, but provides means for their sustenance and comfort. His mercy is everlasting, and over all his works. He supplies the ravens with food; and not a sparrow falls to the ground without his concurrence. He causes his sun to shine, with its refulgent beams, giving light, heat, and nourishment, to the evil and the good; and the rain to descend, watering and refreshing the earth, for the just and the

unjust. He maketh the fig-tree to blossom, and the vine to bear its fruit; the olive to yield her increase, and the field to render its produce. He nourishes the grain, that it may produce the blade, the ear, and the full corn in the ear, giving seed to the sower, and bread to the eater; while the convulsing elements unite to destroy the obnoxious reptile and destructive herb. He gives the flocks to increase in the fold, and the herd to multiply in the stall. He withholds not his hand from blessing, but bestows the fruits in their seasons, and regulates the temperature of the climes. He suits his supplies to the peculiar wants of his creatures, from whatever cause they may arise; and bestows the seed-time and harvest, the summer and winter, for the convenience and comfort of the animated inhabitants of this terrestrial globe. With reference to man, the very hairs of his head are numbered, and every circumstance of life is under the direction and control of the all-wise God. But the bounty of the Creator towards him is displayed, not in directly bestowing the comforts of life, but in blessing his instrumentality, and prospering his efforts to obtain them. For man must sow, and use all means to raise the grain, while he is quite dependent on the Supreme Being for the early and the latter rain, and for the genial rays of the sun, and therefore, for the produce of his labour. God is a God of Providence; but while his general mercies are extended over all the creatures of his power, there are others of a special character which are made subservient to the designs of his grace. In his moral government, we see his hatred to sin conspicuously displayed; while his unwillingness to punish the transgressor is also clearly presented to our notice. He blights the expectation to show the vanity of sublunary bliss, or shines with the mild beams of his love, to allure the wandering soul. He removes from his people

"Whatever passes as a cloud between
Their mental eye of faith and things unseen,
Causing a brighter world to disappear,
Or seem less lovely, or its hopes less dear."

He removes from before the eyes of sense that object to which blind attachment had assigned the empire of the mind, the powers of the soul, and the affections of the heart, to the exclusion of Him, who alone is worthy of the supreme love of all his people. A mystery, in part, now hides his proceedings from the

finite glance of mortals; but when the cloud shall be removed, and his designs be fully developed, our present acquaintance with his physical and moral government, gives abundant reason to show that the book of providence will distinctly set forth that God is love.

But would we contemplate the greatness of his love, we must come to the volume of revelation; and here we see it displayed in a way far beyond the comprehension of finite man. Here the twilight merges into perfect day, and the morning-star is exchanged for the meridian splendour of the noontide sun. Here we see the love of the Father, the Son, and the Spirit, distinctly displayed in one harmonious scheme for man's redemption. Man has sinned; how can he be just with God? The Father devises a plan, but its execution would cost the life of his beloved Son. Does he hesitate? No: for "God so loved the world, that he gave his only begotten Son, that whosoever believeth in him should not perish, but have everlasting life." The scheme of redemption, then, beautifully illustrates the sentiment, that God is love. The Father propounds the plan, and the Son, with alacrity, steps forth to offer himself as the sinner's substitute and surety.

When the fulness of time was come, we see Him, who was the brightness of the Father's glory, and express image of his person, leaving the realms of bliss, passing the shining ranks of angels, descending to this lower world, and enshrining Deity in human flesh, to rescue man. The ruined state of this small floating speck drew forth his love; and he comes to accomplish his mysterious purpose of mercy and of grace. He passes a life full of ignominy, yet at the same time abounding with displays of glory and mercy, and its close brings him to an excruciating death. Elevated, a spectacle to worlds, earth, heaven, and hell unite to inflict the agonies he endures. Devils taunt; men revile; the Father, by leaving him, consummates his sufferings, and draws from him that piercing cry, "My God, my God, why hast thou forsaken me?" He foresaw this, and came willingly to be offered for man, on the altar of God's justice, at once the Victim and the Priest. This was compassion worthy of a God. Mysterious and ineffable love! Calvary proclaims that "God is love."

We perceive the love of the Divine

Spirit also distinctly displayed in applying the advantages to be derived from the Saviour's sacrifice to the individual soul, making a man personally an heir of eternal life, and the blessing of salvation. The work of the Spirit develops the truth of the sentiment, that "God is love."

How complete the plan, how great the grace of the adorable Jehovah! Three persons in one God, uniting to rescue a creature so polluted and depraved as man. The book of revelation expressly declares, and fully illustrates the truth of its declaration, that "God is love."

Dr. Rogers has well observed, "All his perfections and procedures are so many modifications of his love. What is his omnipotence, but the arm of his love? What is his omniscience but the medium through which he contemplates the objects of his love? What is his wisdom but the scheme of his love? What are the offers of the gospel but the invitations of his love? What are the threatenings of the law but the warnings of his love? The voice of his love saying, 'Man, do thyself no harm.' They are a fence thrown round the pit of perdition to prevent rash men from running to ruin. What was the incarnation of the Saviour but the richest illustration of his love? What were the miracles of Christ but the condescensions of his love? What were the sighs of Christ but the breath of his love? What were the prayers of Christ but the pleadings of his love? What were the tears of Christ but the dew-drops of his love? What is the earth but the theatre for the display of his love? What are the heavens but the Alps of his love? from whose summits his blessings flowing down in a thousand streams, descend to water and refresh the church situated at its base."

Wherever we turn our eyes on nature; whenever we open the pages of history to read the dealings of God to man; whatever be the subject that occupies our attention in the sacred volume, the same voice sounds in our ears, calling on us to echo the universal proclamation that "God is love." G. A.

FROGMORE PITCH.

It may be that you do not know Frogmore Pitch. It is at a turn of the road near Layton Cross, and about a

stone's cast to the left. The place takes its name from the road being very steep there, just opposite the great house with the ivy-grown old-fashioned windows, once inhabited by Squire Frogmore. I have known it ever since I was a boy, and many a time have I stood leaning on the milestone, a heap of stones on one side, and a bed of nettles on the other, to see the horses of a loaded team pull and stretch with all their might, to get up the Pitch with their load.

If a dozen men were to set to work in good earnest, they might, in a little time, by cutting away the top of the hill and lowering the road, save man and beast a great deal of trouble; but no, this has never been done: Frogmore Pitch it was forty years ago, and Frogmore Pitch it is still, just as steep as ever.

It is hard to say how much vexation men will endure rather than put themselves out of their way to remove the cause of their trouble. Though every farmer in the parish has railed against the road for years, and allowed his horses to be flogged up it a hundred times, yet not one among them has had the spirit to set about doing what ought to have been done so long ago. More horses have been strained there, and more whipcord worn away, than in any place that I know of.

Twenty times a day you may hear the grinding of the wheels, the jingling of the traces, as the horses give a sudden snatch; the bawling of the wagoner, and the smacking of the whalebone whip. Other places may be quiet, but for six days in the week there is very little of it at Frogmore Pitch.

Jennings the wheelwright, and Wheatley the smith, at one time lived at the far end of the parish, and hardly got on any how, but since they came to live within a hundred yards of the Pitch, things have quite altered with them. No two men are doing better; for what with splintered shafts, damaged wheels, cast shoes, and broken traces, they carry on a thriving trade of it. Lowering the road would be a good day's work for the whole parish, but it would be a bad day's work for Wheatley and Jennings.

It so happens that we bear our neighbours' mishaps a great deal better than we do our own, otherwise Frogmore Pitch had been lowered ten or a dozen feet these forty years ago. Not but what such a thing has been threatened over and over again, but there seems

no more likelihood of the place being altered now, than there did when I used to lean on the milestone, as I told you, and witness the lashing and thrashing of the horses.

Gubbins the miller, many years since, had a load of flour to send to the wharf at the canal. Thirty sacks are a smart load for four horses up such an ascent as that, and it turned out to be more than they could manage; for the shaft horse got a wrench that he never recovered from, and Gubbins was determined to have the Pitch lowered.

Hilton the tanner, was surveyor of the road then, so Gubbins went to him, and tried all he could to get him to set men to work directly, but Hilton put it off from day to day, till he was out of office; and Gubbins himself was made surveyor.

Soon after this, Hilton's team met with an accident there in pulling a load of bark up the Pitch: off went Hilton to Gubbins, being quite convinced of the necessity of lowering the road; but, no! no! Master Gubbins himself had not forgotten how he himself had been served. Revenge is too dear to human hearts; we ought to forgive and endeavour to forget slights and injuries; but the things we ought to do we do not, though we are quick enough to do what we ought not to do. Gubbins then would have paid money out of his own pocket to keep the road as it was, to spite his neighbour Hilton, rather than have had the Pitch lowered for nothing, and so it remained just as it was.

Whether or not Gubbins had ever met with the text in his Bible, "Avenge not yourselves," I cannot tell; but if so, it had done him no good; for he gloried in having the opportunity of spiting his neighbour.

At another time farmer Suffield's wagon was bringing home coal from the forest pits, when in pulling up the Pitch the trees broke, and the wagon ran back into the ditch. It was well that it did not happen a little lower down; for then the wagon and horses too, would have all gone into the stone quarry together. As it was, however, mischief enough was done; for one side of the wagon was broken, and one of the horses killed upon the spot, nor could they get the wagon out of the ditch without unloading it. Suffield was surveyor himself, so that no doubt the Pitch would have been lowered at once; but it so

happened that a dispute had arisen in the parish about the highway rate, and no money was to be had. Farmer Suffield would willingly have paid his share of the expense, but he was not willing to pay for his neighbours; and so Frogmore Pitch remained unaltered.

I question if Madam Blakey, who lived at the Court-house, would not have lowered the road at her own cost, being a kind-hearted lady, and having heard of the many accidents that had taken place; but just as she was about to employ men for the purpose, Wheatley, the smith, had to go up to shoe one of Madam's coach-horses, and when he heard what was about to be done, he made it his business to speak about the matter.

"Why, madam," said he, "it is very kind of you to undertake the thing; but you see that the harvest is just begun, and hands are wanted. If you take the men away from their work just now, most likely the poor fellows will lose their places; and I am sure, madam, you would not willingly injure them, and their wives, and their helpless children."

Kind-hearted people are more likely than others to be deceived by the artful and hypocritical: no wonder that Madam Blakey let the affair rest awhile; and then winter came, and the ground was so hard that the men could not work, and then there was a heavy fall of snow: so that, what with one thing, and what with another, it was put off till the spring. That spring, alas! Madam Blakey was called to a better world, for which she was well prepared: she believed in Him in whom whosoever trusteth shall never be confounded.

There was a great change at the Court-house; but none took place in the road. No! Frogmore Pitch remained just as it had been, and just as it is now.

About two years ago, Robbins the timber merchant, who lives at Oldcroft, had an elm put on his timber carriage going up the Pitch, just as Squire Birch came to the same place in a post-chaise. The post-boy got impatient, and whipped and spurred his horses full dash against the wheel of the timber carriage; the chaise was overturned, the pole of the chaise snapped in two, one of the side panels was crushed in, and the front window broken.

Squire Birch threw the blame on

the timber carriage, and Robbins in his turn blamed the post-boy, and as neither was willing to pay for the damaged chaise, they went to law.

Robbins gave it out that if he gained the day, he would lower the Pitch at his expense; and as he seemed likely enough to gain it, the other side being in fault, all concluded that Frogmore Pitch would be lowered at last.

When the trial came on, Jennings the wheelwright, who happened to see the accident, was called as a witness. Things were going all one way against Squire Birch, but Jennings, who feared that if the Squire lost the day, Robbins would set to work in right earnest, turned the tables completely. By his account, the chaise was going up the Pitch as slowly as the horses could walk, when all of a sudden the timber carriage ran back against it, and knocked it over like a nine-pin. Squire Birch won the trial, and Robbins the timber-merchant said, that not one single farthing would he ever pay towards lowering Frogmore Pitch, if it was not lowered these fifty years.

Now, I need not say a word as to the character of that man who would thus give false evidence, merely to serve his own interest.

Last New Year's Day, a grazier, I forget his name, but he lives somewhere by the Five Oaks, had bought a wagon-load of hay of old Baylis, down at Marstow Meadows; for fodder was scarce, and he ran rather short. Well, the hay was sent, but the grazier soon made Baylis's man turn his horses' heads back again, for every truss of hay was as musty as a loaf of bread a month old. The wagoner drove back again in a pet, and was foolish enough to go down Frogmore Pitch without locking the wheel. The shaft horse went sliding on his hind feet down the Pitch, leaning back against the hinder band; but he could not keep the wagon from coming on faster and faster. The hay was overturned, and two of the horses driven right over the little low bridge at the foot of the Pitch.

I know not how much damage was done, but I know that in spite of all old Baylis could say, not one spadeful of earth was removed from the top of Frogmore Pitch. The calling and bawling of the wagoners, the smacking of whips, the stretching and striving of the horses, the ringing and jingling of the

chain-traces, and the harsh grinding of the wheels against the hard ground, are going on to this very hour, and seem likely to continue for fifty years more.

But why, think you, have I told you this long story of Frogmore Pitch? Do you suppose that I had no object in view? If you do, you are very much mistaken. You no doubt consider with me, that Gubbins the miller, Hilton the tanner, and Suffield the farmer, and Robbins the timber-merchant, as well as the rest of them in the village, are very silly people; but what will you say, if I make it out, reader, that perhaps you are as silly as any one of them?

You must not suppose that Frogmore Pitch is the only one that wants removing. No! There is a Frogmore Pitch not in every parish only, but in every house, and in every heart.

The Frogmore Pitch that I have described before, is the cause of much strife, ill-will, pain, and sorrow; and is there in your bosom no hasty spirit, no covetous desire, no bad passion, no besetting sin, that occasions strife, and ill-will, and pain, and sorrow? If there be, it is a Frogmore Pitch to you, and requires to be removed. You have blamed the people of the village, but have you not fallen into similar errors? Have you not, when smarting under the trouble that your sin or your infirmity has brought upon yourself, resolved again and again to subdue and remove it, and yet is it not at this hour unsubdued and unremoved?

There is every encouragement in seeking for Divine aid, and setting about the thing at once. "If we say that we have no sin, we deceive ourselves, and the truth is not in us. If we confess our sins, God is faithful and just to forgive us our sins, and to cleanse us from all unrighteousness." Come, then, let us up, and be doing; let us go to work in a good spirit, let us call for heavenly aid. "The Lord is nigh unto all them that call upon him, to all that call upon him in truth. He will fulfil the desire of them that fear him: he also will hear their cry, and will save them."

If this be our resolution, the telling of the tale of Frogmore Pitch will not have been in vain.

THOUGHTLESSNESS.

YOUNG persons are apt to suffer habits of thoughtlessness and inattention to grow

upon them, which greatly lessen their value in the domestic or social circle, and often produce very mischievous results to themselves and others. Yet they seldom examine this fault aright, or charge upon it its real degree of criminality, or consider it their bounden duty to make a proper effort to cure themselves of it. It is no uncommon thing for a young person, not in general ill-disposed, who has received express injunctions to attend to some particular business at a certain time, when it is past, and the question is proposed, "Have you done as you were directed?" to reply, without any expression of very deep concern, "No, I never once thought of it; I entirely forgot it." At most the addition is, "I am sorry for it," but generally there is no real self-reproach, nor any determined effort at reformation. Because the mischiefs that might result from an act of thoughtlessness do not always result, these people seem to forget the very possibility of their occurrence, or at least, to flatter themselves that they shall always be fortunate enough to escape. Sometimes, however, they are taught a very painful lesson, in the inconvenience suffered by themselves, or those dear to them, in consequence of their forgetfulness. It is well if even such a lesson produces abiding improvement. The following painful incident has recently happened. Time alone will prove whether it has really wrought any salutary effects on the party concerned.

A much esteemed friend of the writer, on his way home from a journey undertaken with a view to health, became much worse, and was unable to proceed. Anxious, in any suitable way, to express heartfelt sympathy, and to offer any aid that might in the slightest degree alleviate the sufferings of her afflicted friend, or the fatigues of his nearest relatives, yet unwilling to obtrude on an afflicted family at a moment which might not be convenient, a note was left, soliciting the privilege of rendering any assistance that might be acceptable either by day or by night. Next day one of the family called, expressed cordial thanks, and said, that the offer would be accepted should occasion arise. From day to day inquiries were made after the sufferer. The replies were, "Very bad"—"worse"—"Not expected to survive the night," yet no call was made for the proffered services. On Wednesday morning, a female servant, a girl of much good feeling, but

thoughtless, while pursuing her regular business, carelessly said to her mistress, "Oh, Ma'am, I quite forgot to tell you that on Sunday evening young Mr. — called, and wished to see you. It was just after you were gone out." "Did he leave any message?" "No." "Did you tell him where I was, and at what time I should be at home?" "No." "Did you offer to call Miss —?" "No, she was up-stairs; and I did not think of calling her, as he asked for you; and I never once thought of it since to tell you of it, when I happened to see you."

With agitated feelings the writer instantly hastened to the house of affliction, but it was too late; her friend had expired an hour or two before. The call of Sunday evening had been with a request that she would undertake the task of night-watching; and as she did not attend, it was concluded that she was out of town, and no further application was made for her services. Thus, through mere thoughtlessness and forgetfulness, she was deprived of the privilege of ministering to the last comforts of a long endeared friend; of testifying her sympathy by sharing the fatigues of his afflicted family, and of gathering instruction and consolation from the rich experience of a departing saint.

Young people, do not suffer this abominable habit to gain the ascendancy over you. Accustom yourselves, when anything is committed to you, to get it so thoroughly riveted in your mind that you can have no rest until your duty is discharged in the proper season. Do not shelter yourselves under the lamentation of having a bad memory; but consider it your bounden duty to strengthen that power, and to feel yourselves responsible for all the mischiefs that do or may result from its treachery. Act by a plan; have a time allotted for the performance of every class of duties; and lest you should suffer any details to escape, keep at hand a memorandum book or slate, on which invariably to enter notes of every thing you ought to do. Keep also stated times, say every meal-time, or even every hour, to refer to this check on your memory, and see whether you have actually done the things required of you. The very regularity observed, and the time occupied in the engagement, will keep out many of those frivolous vagaries which, engrossing the attention and memory, thrust out matters of real importance.

Thoughtless persons are not those who do not think at all, but those who bestow their thoughts on trifles, instead of fixing themselves on worthy objects. The smallest duty is a matter of real importance. It may be added, that those who feel conscious of a wandering imagination and defective memory, should, while they use every proper means for correcting the one and strengthening the other, make it a matter of frequent prayer that the Holy Spirit may turn away their eyes from beholding vanity, and write on their hearts all the laws of God, that thus they may become a memorandum-book to themselves, and examples of conscientious regularity to those around them. C.

INSECTS IN SOUTH AMERICA.

AFTER sunset, swarms of bats made their appearance; no place was free from them; they entered the houses, and if the candles escaped being put out by the fanning of their wings, it was only to be flapped out by some large painted moth, which, attracted by the light, followed close after them. So numerous were the bats, that in the morning our horses' backs were often found streaming with blood, from the attacks of these creatures. In entering the old workings of the mines, a whole swarm of them would rush past the candle, in all probability putting it out before they made their escape. If a sugar-basin were placed upon the table, though as I have frequently noticed, not one has been seen before, yet in two or three minutes, long strings of ants would make their appearance, all wending their way towards one common centre, the sugar-basin. Some small and diminutive scout, posted I suppose to watch, though no one knows where, had conveyed the intelligence, and forthwith whole legions sallied out.

At certain times of the year, there is a small species of ant that acquires wings, when they become still more troublesome; for, in their new character, their accustomed sagacity and prudence seem to forsake them, and they fly into the candles, until they extinguish them by their dead bodies, while all below is covered with the killed, maimed, and wounded. The bichaco, a large red ant, which congregates in immense numbers, is very formidable. If, in the course of its emigration, it should meet with a stable, as it passes through that stable,

(for it never deviates from its course,) every thing must be off; the rats and serpents forsake the roof; and the horses, unless they are let loose, break their fastenings, and decamp.

I happened at one time to ride under a low tree, which was covered with these creatures; and, as I was riding fast, I did not perceive them as I rushed through its foliage. In a moment or two I was astonished by the violent plunging of my horse, and immediately after by something biting through my linen trowsers. It was with great difficulty I pacified the animal, until the furious little creatures were dislodged from his skin. Though they are celebrated as strategists, yet these little insects, when disturbed, fall immediately to work, wherever they may alight, pell mell; fighting and biting without any regard to arrangement or order, and without any of the slackness of fear.

A numerous colony of this kind of ant had established itself in the midst of a large piece of land, intended for the growth of maize; the seed was sown, and in a day or two it was all carried off. Another attempt was made, and again the maize disappeared: and in spite of all that could be done, by attacking their large hillocks, often several yards broad, with shovels and spades, they still kept possession of their strongholds. Like *Herculaneum* or *Pompeii* in their present state, their city was far below the surface, and as if the hint had been taken from *Hercules* at the *Augean* stables, they were only conquered at last, by turning the river over their haunts.

This species of ant consumes a large quantity of leaves in the construction of its nest: and in the woods I have frequently passed long columns of them, eight or nine inches broad, following each other in thick array, and extending many hundred yards in length. Each had a piece of leaf, cut to a circular shape at the top, hoisted over its head; and hid beneath the green leaves, they presented a most curious appearance, as if a whole regiment of small leaves had been enabled to stand erect and to walk off by themselves. A number of their fellows, winding through the ranks, were returning empty-handed to where the leaves were clipped, and evidently at full speed. Occasionally they stopped for a moment, to help up some unlucky wight who had tumbled down from the top of some root, not an inch high, or to lend a hand to

help another brother, whose leaf had become transfixed by a sharp spine, and who was tugging away with all his might to get it off again.

Another species of this insect, called a *comien*, of small size, having a white body and black head, was much more destructive in its ravages. In the house or out of doors, in the mines or in the stores, it was equally dreaded. Possessing an extraordinary appetite for wood, it eats fallen trees by the hundred. Once established in a wooden bridge, and a mine of gunpowder could not destroy it more effectually. Once having made its way to the timbering of the mines, nothing could be more certain in bringing the roof about their heads. In the warehouses of the merchant, this ant, if it once obtains an entrance, is very destructive. Should it happen to get in by the floor, and after eating its way through the boards, to find its way stopped by a bale of goods, it begins forthwith to eat directly upwards; and though half a dozen bales should be piled one upon another, it eventually appears at the top of the uppermost.

A large hairy spider, a kind of *taran-tula*, used to make its way into the stables at the mines, and bite the horses' heels; after which, the hoof almost invariably came off, and if not, a perfect cure could seldom be effected in less than a year.—*Hawkshaw*.

MEALS OF THE ARABS.

THE Muslim takes a light breakfast after the morning prayers, and dinner after the noon prayers; or a single meal instead of these two, before noon. His principal meal is supper, which is taken after the prayers of sunset. A man of rank or wealth, when he has no guest, generally eats alone; his children eat after him, or with his wife or wives. In all his repasts, he is moderate with regard to the quantity which he eats, however numerous the dishes. In former times, it appears that the dishes were sometimes, I believe generally, placed upon a round embroidered cloth spread on the floor, and sometimes on a tray, which was either laid on the floor or upon a small stand on a stool. The last is the mode now always followed in the houses of the higher and middle classes of the Arabs. The table is usually placed upon a round cloth, spread in the middle of the floor, or in a corner, next two of the *deewans*, or low

seats, which generally extend along three sides of the room. It is composed of a large round tray of silver, or of tinned copper, or of brass, supported by a stool, commonly about fifteen or sixteen inches high, made of wood, and generally inlaid with mother-of-pearl, tortoise-shell, etc. When there are numerous guests, two or more such tables are prepared. The dishes are of silver, or of tinned copper, or of china. Several of these are placed upon the tray; and around them are disposed some round, flat cakes of bread, with spoons of box-wood, ebony, or other material, and, usually, two or three limes, cut in halves, to be squeezed over certain of the dishes.

When these preparations have been made, each person who is to partake of the repast receives a napkin; and a servant pours water over his hands. A basin and ewer of either of the metals first mentioned are employed for this purpose; the former has a cover with a receptacle for a piece of soap in its centre, and with numerous perforations through which the water runs during the act of washing, so that it is not seen when the basin is brought from one person to another. It is indispensably requisite to wash at least the right hand before eating with the fingers, any thing but dry food; and the mouth, also, is often rinsed, the water being taken up into it from the right hand. The company sit upon the floor, or upon cushions, or some of them on the *deewan*, (the raised part round the sides of the apartment,) either cross-legged, or with the right knee raised: they retain the napkins before mentioned; or a long napkin, sufficient to surround the tray, is placed upon their knees; and each person, before he begins to eat, says, "In the name of God," or, "In the name of God, the Compassionate, the Merciful." The master of the house begins first: if he did not so, some persons would suspect that the food was poisoned. The thumb and two fingers of the right hand serve instead of knives and forks; and it is the usual custom for a person to help himself to a portion of the contents of a dish by drawing it towards the edge, or taking it from the edge, with a morsel of bread, which he eats with it: when he takes too large a portion for a single mouthful, he generally places it on his cake of bread. He takes from any dish that pleases him; and sometimes the host hands a delicate morsel with his fingers to one of his guests. It is not allowable to touch food with the

left hand (as it is used for unclean purposes) excepting in a few cases, when both hands are required to divide a joint. With respect to clean and unclean meats, the Muslim is subject to nearly the same laws as the Jews. Swine's flesh and blood are especially forbidden to him; but camel's flesh is allowed. The latter, however, being of a coarse nature, is never eaten when any other meat can be obtained, excepting by persons of the lower classes, and by Arabs of the desert. Of fish, almost every kind is eaten, (excepting shell-fish,) usually fried in oil: of game, little; partly in consequence of frequent doubt whether it have been lawfully killed. The diet consists, in a great measure, of vegetables, and includes a large variety of pastry. A very common kind of pastry is a pancake, which is made very thin, and folded over several times like a napkin; it is saturated with butter, and generally sweetened with honey or sugar; as is also another common kind, which somewhat resembles vermicelli.

The usual beverage at meals is water, which is drunk from cooling, porous, earthen bottles, or from cups of brass or other metal; but in the houses of the wealthy, sherbet is sometimes served instead of this, in covered glass cups, each of which contains about three quarters of a pint. The sherbet is composed of water made very sweet with sugar, or with a hard conserve of violets or roses, or mulberries, etc. After every time that a person drinks, he says, "Praise be to God," and each person of the company says to him, "May it benefit:" to which he replies, "May God benefit thee." The Arabs drink little or no water during a meal, but generally take a large draught immediately after. The repast is quickly finished; and each person, as soon as he has done, says, "Praise be to God," or "Praise be to God, the Lord of creatures." He then washes, in the same manner as before, but more thoroughly; well lathering his beard, and rinsing his mouth.

The Arabs have various kinds of sherbets, or sweet drinks; the most common of which is merely sugar and water, made very sweet. The most esteemed kind is prepared from a hard conserve of violets, made by pounding violet flowers, and then boiling them with sugar. Other kinds are prepared from conserves of fruits, etc. The sherbet is served in covered glass cups, containing from two-

thirds to three-quarters of an English pint. These are placed on a round tray, and covered with a round piece of embroidered silk, or cloth of gold; and on the right arm of the person who presents the sherbet, is hung a long napkin with a deep embroidered border of gold and coloured silks at each end, which is ostensibly offered for the purpose of wiping the lips after drinking, though the lips are seldom or scarcely touched with it.—*E. W. Lane.*

INFANTICIDE IN MADAGASCAR.

THE superstitions of the Malagasy lead them to regard certain days and hours as unlucky, and for an infant to be born at such times is considered fatal. These periods are calculated and declared by a class of men called Penandro, "astrologers." To these the relations or the parent of a new-born infant repair almost immediately after it has entered the world, to learn from them the vintana, or destiny of the child, as if they could not give free current to the tide of their joyous and affectionate feelings, until they had ascertained whether those feelings must be suppressed, and the object of their kindling emotions be recklessly torn from their embrace, or whether they might venture to express towards it their tenderness and love.

In some cases, it is considered sufficient to make a prescribed offering with a special view to averting the evil of the child's destiny. The parents' hopes being by this confirmed, they return to indulge in the overflowings of their joy over the dear object of which a murderous superstition has not deprived them. In other cases, there must be exposure to death, or death must be inflicted.

The decisions of the penandro are threefold: either a faditra, or offering, must be presented, to remove evil; the child must be exposed to death, by being placed in the narrow path at the entrance to a village or a cattle fold; or, it must be put to death. When a vintana or destiny is declared to be favourable, no ceremony follows. If the decision be unfavourable, (a not unfrequent case,) there is ground for but very feeble hopes of the infant's life; yet still the affectionate parents fondly cherish these hopes as long as there is the least prospect of their being realized.

The tendency of all the systems of

absurd and degrading superstition which enslave and afflict mankind, is to triumph in fiendlike despotism over the first, the strongest, and tenderest dictates of humanity; yet, perhaps, amidst the various exhibitions of its malignant domination, it does not unfold a scene of more affecting wretchedness than is presented on these occasions. An infant, a new-born, perfectly helpless, unconscious infant, smiling perhaps in innocence, is laid on the ground in the narrow entrance to a village, or a fold, through which there is scarcely room enough for cattle to pass; several cattle are then driven violently in, and are made to pass over the spot in which the child is placed, while the parents, with agonizing feelings, stand by waiting the result.

If the oxen pass over without injuring the infant, the omen is propitious, the powerful and evil destiny is removed; the parents may without apprehension embrace their offspring, and cherish it as one rescued from destruction. But should the delicate, frail, and tender body of the helpless victim be mangled and crushed to death by the rugged feet of the oxen, which is most frequently the case, the parents return to mourn in bitterness of grief their loss, with no other consolation than that which the monstrous absurdities of their delusions supply—that, had their beloved infant survived, it would have been exposed to the influence of that destiny which now required its exposure to destruction.

Distressing, however, as this is, it is in some respects less so than the practice which remains to be noticed. This refers to the instances in which it is declared that exposure will not be sufficient, that there is no possibility of avoiding the doom pronounced, and that death must be inflicted. No labour could secure exemption for the hapless victim; no offering or sacrifice could propitiate the powers on whom its destiny depended, and avert its destruction; no treasures could purchase for it permission to live, and those who otherwise would have cherished it with the tenderest affection, and have fostered it with unceasing care through infancy and childhood, are reduced to the dire necessity of extinguishing that life which the dictates of nature would have taught them to regard as equally precious with their own. When this inhuman decision of the astrologers has been announced, the death of the innocent victim is usually effected by

suffocation. The rice-pan, a circular wooden utensil, slightly concave on one side and hollow on the other, is generally employed. It is filled with water, and the infant is held with its face downwards in the water, till life becomes extinct; sometimes a piece of cloth is placed on the child's mouth, to render its suffocation more speedy. The remains of the infant thus murdered, are buried on the south side of the parents' house, that being superstitiously regarded as the part appropriated to what is ill-omened and fatal. The parents then rub a small quantity of red earth into their clothes, and afterwards shake them, as if to avert or shake off from themselves the evil supposed to attend their slight and transient contact with that which had been doomed to destruction.

Another mode of perpetrating this unnatural deed, is by taking the infant to a retired spot in the neighbourhood of the village, digging a grave sufficiently large to receive it, pouring in a quantity of water slightly warmed, putting a piece of cloth upon the infant's mouth, placing it in the grave, filling this up with earth, and leaving the helpless child, thus buried alive, a memorial of their own affecting degradation, and the relentless barbarism of their gloomy superstition—a trophy of the dominion of the destroyer of our race, and a painfully conclusive illustration of the truth of that word which declares, that the dark places of the earth are full of the habitations of cruelty.

These heart-rending transactions are generally performed by the parents themselves, or some of the nearest kindred of the family, frequently by the father; while the mother, anxious to press the infant to her bosom as long as possible, holds it while preparations for the savage deed are going forward; and when it is taken from her arms, to be consigned thus prematurely to the earth, gives vent to her anguish and distress by lamenting and weeping, in which she is joined by her female kindred and companions, who return with her in sad procession to her dwelling.—*Ellis's Madagascar*.

SAGACITY OF A DOG.

WE started from Geneva, says a traveller, on our way to Basle, when we discovered that a dog was following us. We found on inquiry that it did not belong to the *voiturier*, (the carrier,)

and we then concluded that it would not be our companion for any considerable distance, but would take to the right or left at some turning, and so go to his home. This, however, was not the case; for he continued with us through the whole of the day's journey. When we stopped for the night, by close attendance on us as we alighted, and sundry wags of the tail, looking up into our faces, he installed himself in our good graces, and claimed to be enrolled a regular member of the *cortège*. "Give that poor dog a good supper; for he has followed us all day," was the direction to the people of the inn; and I took care to see it obeyed. This affair of the dog furnished conversation after our dinner. We were unanimous in the conviction that we had done nothing to entice the animal, and washed our hands of any intention to steal him. We concluded he had lost his master, and, as all well educated and discriminating dogs will do in such a dilemma, that he had adopted other protectors, and had shown his good sense and taste in the selection. It was clear, therefore, that we were bound to take care of him.

He was a stout dog, with a cross of the mastiff in him; an able-bodied trudger, well formed for scuffling in a market-place. He was a dog also of much self-possession. In our transits through the villages, he paid but little attention to the curs which now and then attacked him. He followed us to Basle; we assigned to him the name of Carlo, which he had already learned to answer readily; we became quite attached to him, and the affection appeared to be mutual. At Basle we told the innkeeper the story, and added that we had now nothing to do but to take the dog to England with us, as we could not shake him off. The landlord smiled. "Why," said I, "is it your dog?" "No," said he. "Does he belong to any one that you know?" "No," replied the host. "Why do you smile then?" "Vous verrez." (You will see.) "Well, but explain." "Well then," said the landlord, "this dog, which belongs to no one, is in the habit of attaching himself to travellers passing between this place and Geneva. He has often been at my house before. I know the dog well. Be assured he will not go further with you." We smiled in our turn: the dog's affection was so very marked. "Il y trouve son compte," (He finds it to his advantage) said the

landlord—"c'est son gagne-pain!" (It is his livelihood.) We smiled again. "Encore," (still) resumed the landlord, "vous verrez." (You will see.)

The next morning the dog was about as usual. He came to us, and received a double portion of caresses for past services, also some food in consideration of the long trot before him. The horses were to—we sprang into the carriage, and off we started. "Hie Carlo! Carlo—hie Carlo!" Not a leg did he wag, but only his tail. "Carlo,—Carlo—Carlo!"—Not a bit did he stir. He stood watching us with his eyes for a few seconds, as we rolled along, and then turning round, walked leisurely up the inn-yard!—*Jesse's Gleanings.*

THE TORNADO.

It began to blow at Barbadoes on the 9th of October, 1780, but it was not apprehended until next day, that there would be any thing more than such a gale of wind as is experienced from time to time in this island at that season. On the evening of the 10th, the wind rose to such a degree of violence as clearly to amount to what is called a hurricane. At eight P. M., it began to make impression on all the houses, by tearing off the roofs, and overthrowing some of the walls. As the inhabitants had never been accustomed to such a convulsion of nature, they remained for some time in security, but they now began to be in the utmost consternation. It was thought to be at its greatest height at midnight, and did not abate considerably till eight o'clock next morning. During all this time, most of the inhabitants had deserted their houses, to avoid being buried in the ruins: and every age, sex, and condition, were exposed in the fields to the impetuous wind, incessant torrents of rain, and the terrors of thunder and lightning. Many were overwhelmed in the ruins, either by clinging too long in them for shelter, or attempting to save what was valuable, or by unavoidable accidents in the fall of walls, roofs, and furniture, the materials of which were projected to great distances. Even the bodies of men and cattle were lifted from off the ground, and carried several yards. An estimate has been attempted of the number of deaths, from returns made to the Governor, and they amounted to more than 3000, though several parishes had not given in the returns, when I was there.

—All the fruits of the earth, then standing, have been destroyed, most of the trees of the island have been torn up by the roots; and, what will give as strong an idea of the force of the wind as any thing, many of them were stripped of their bark. The sea rose so high as to destroy the fort, carrying the great guns many yards from the platform, and demolishing the houses near the beach. A ship was driven on shore against one of the buildings of the Naval Hospital, which, by this shock, and by the impetuosity of the wind and sea, was entirely destroyed and swept away.—The mole head was swept away; and ridges of coral rock were thrown up, which still remain above the surface of the water; but the harbour and roadstead have upon the whole been improved, having been deepened in some places six feet, in others many fathoms. The crust of coral, which had been the work of ages, having been torn up, leaving a soft oozy bottom, many shells and fish were found ashore, which had been heretofore unknown.—*Sir Gilbert Blane.*

SUBMISSION.

He that sits upon the throne of the universe, who shakes heaven and earth with his voice; who has it in his power to lodge a heaven or a hell in thy breast, by his smiles or frowns, according as he pleases to reward thy submission, or to punish thy discontent,—who can employ twelve legions of angels to be thy guard, or so many devils to be thy tormentors; he that can silence thy murmurs with thunder, or stop thy insolent breath with fire and brimstone, and a horrible tempest; *shall not his excellency make thee afraid?* He that dwells in light that is unapproachable; before whom angels veil their faces, and by so doing confess his glory to be above all creature power to bear; shall I lift up my bold front against this God, and charge that Glory with shame, that Brightness with a spot, that Wisdom with folly, and that Justice of his with iniquity?—*Dr. Grosvenor.*

THE DESIRES.

He whose desires are a hundred times larger than the desires of others, and for a hundred things more, is every day liable to so many hundred times more vexations and disappointments.—*Dr. Grosvenor.*

OBSERVATIONS ON THE VERTEBRAL COLUMN.

THOUGH every part of the works of the Almighty Architect are replete with proofs of his skill and wisdom, though order and harmony reign through them all; though the provision of means to a given end is everywhere apparent, and cannot but be felt by the reflective man conversant with nature; still it often happens that some one point will suddenly strike our minds, come home as it were to our feelings, and raise emotions of admiration and gratitude to God. We recur to it as to some exquisite and superlatively beautiful piece of mechanism; we regard it with more than ordinary satisfaction; it appeals to us with power, and speaks of Him whose care and goodness and wisdom are in all his works. These feelings may as often perhaps depend upon the habitual or accidental tone and disposition of the mind, as upon the nature of the object or example in question; which in others might not have produced a similar impression; yet surely, to no one, can the slightest proof of the omnipotence of God be destitute of interest. Has any of our readers ever considered attentively the mechanism of the vertebral column as a whole, connected with the purposes it is destined to serve, and the importance it assumes from its use? We were examining a few days since, the osseous structure of the neck of a pelican, a bird in which this part is long and flexible, and could not help being struck with its admirable construction, and the nicety of the mechanism. This, we mentally exclaimed, this is no result of blind chance or accident! it teems with evidences of unerring wisdom! Of all fools a naturalist-atheist must be the greatest.

Now it is not to the neck of the pelican that we wish to direct our reader's attention, but to a general view of the vertebral column, as it is seen in mammalia and in birds; for in these, and especially in mammalia, it is most complete in its parts and in their mutual collocation.

The vertebral column consists of a number of distinct bones conjoined together, each having a body and a ring of processes encircling an orifice, so that from their apposition a canal is the result, continued throughout the length of the column, and bounded by the body of the bones anteriorly, and posteriorly by the processes. The subjoined rough

sketch of one vertebra, (as each bone is called,) will make this plain.



Through the canal thus formed there runs a continuation from the brain, termed the medulla spinalis, or spinal marrow, distributing through certain openings between the vertebræ, nerves to the body and limbs. Pressure on the medulla spinalis, or injury inflicted upon it, is of the most serious consequence, being followed by paralysis, or death. Yet we know the spine to be very flexible. We can bend the body in various directions, and that with considerable force. The giraffe or antelope can turn its graceful neck, now stooping it, in order to browse upon the herbage at its feet, now stretching it up to reach the foliage of the tree. The swan can wreath its neck in a thousand graceful undulations, and the whole body of the snake is tortuous in the extreme. How happens it that the medulla spinalis escapes uninjured, that it escapes pressure during the flexure of the vertebral column?

If we examine the relationship of the



bones to each other, even in the pliant neck of the swan or pelican, we shall find that their degree of motion with respect to each other is very limited; the angle mutually made by any two bent as much as the nature of articulation and the ligaments which secure it, will allow, being very obtuse, so as in no degree to inflect the medulla spinalis abruptly, or at an acute angle. The extent of mobility with which the neck of the swan is endowed, does not then depend upon the laxity of the union of the separate portions of its osseous structure, (for the articulations are strongly knit, and allow only a slight angle to be made upon them separately,) but upon the length of the column itself, and the multitude of the separate parts composing it. Such is the case with the snake, which can twine its length around any object, or coil itself into a fold of circles. Each vertebra has but a limited independent motion, and the angle made by any two together is a mere trifle; but then they are small, exceedingly numerous, and constitute a long chain, so admirably constructed, that twine as the creature may, no sudden, no acute angle can possibly press or rupture the spinal marrow: all its bendings are easy, not made upon one or more particular spots, but diffused, as it were, throughout its whole extent. If the vertebræ of the necks of birds, and the bodies of serpents have their sphere of motion, with respect to each other thus limited, much more so is that which obtains with respect to the vertebræ of man, and the mammalia in general. More firmly, more solidly knit together than in the neck of birds, (we say the neck, be-

cause the dorsal vertebræ in these creatures are soldered together,) or in the long bodies of snakes, the motion of each respective bone is scarcely to be appreciated; indeed were it not for an elastic cushion of cartilaginous matter interposed between the bodies of the vertebræ, (and that to a considerable degree of thickness,) this motion would be still more limited than it is. To this layer is to be mainly attributed the flexibility which the spine of mammalia exhibits: from this it derives its power of accommodating itself to the various movements of the animal; from the vermiform weasel, to the solid clumsy elephant. In various quadrupeds the flexibility of the spine, varies accordingly. In some this power is very trifling, residing perhaps, in no portion of its length, while in others it is more or less decided; not perhaps in every part, (for the trunk usually requires great solidity,) but in the neck, or in the loins; as in the giraffe, where the neck approaches in its contour to that of the swan, and the cat or weasel, whose loins are highly endowed with this accommodating property. We need not say that with the flexibility of the spine is associated the general structure of every other part of the frame, and consequently that it has an intimate relationship to the habits and manners of all vertebrate animals: for this is almost self-evident, and we have often alluded to the according harmony of parts uniting in the accomplishment of a perfect whole. What struck us, and what we wish rather to insist upon, is the mode adopted for securing the integrity of the spinal marrow, an organ of vital importance, and for allowing at the same time that degree of flexibility (so considerable in the neck of some, in the loins of others, or throughout the whole frame of certain animals,) which the prescribed habits, manners and nature of the being may require. This we have seen produced, not by the great mobility of each separate vertebra, but by the combined mobility of every part of which the column or chain consists. We may compare the spine to an elastic rod of yew or hazel. Bend it abruptly, so as to produce an acute angle, and it snaps; press the two ends so as to make every part yield a little, and you may bend it into a circle.

While then the spinal column is moveable, and pliant, the spinal cord is secure, unpressed and uninjured; thou-

sands bend their bodies to the right, or to the left, or stoop to their toilsome task "from morn to dewy eve," and never dream that their very attitude speaks of God; that a vital organ is especially protected, and its safety provided for, while the body bends to the ground, while in the enjoyment of the suppleness and vigour of youth, it wreathes from side to side, assumes various attitudes, and tries different postures. Yet man is not alone in the care and provision thus exercised, he shares them with the lower orders of creation; for "His tender mercies are over all his works." The neck of the bird; and the body of the snake proclaim the hand of their Creator as clearly as the graceful, noble, lordly figure of exalted man. M.

THE CALABASH.

Cucurbita Lagenaria.

THE calabash, is a kind of gourd, and belongs to that family of twining plants which were called among the Hebrews, "wild vines," but by the botanists of modern times, the *cucurbitaceæ*, or cucurbitaceous plants. The leaves and flowers resemble those of the common pumpkin, but the gourd assumes every possible variety of shape and size, and when ripe, has a woody crust or shell, lined with a spongy or pithy kind of matter, which contains the seeds, and has a peculiarly bitter taste. The writer remembers, when at Pitcairn Island, having tried its flavour where there was no refreshing stream to wash away the effects; in consequence of this, the bitter sensation remained for several hours. It is said to lose this bitterness, if boiled when young and fresh, and that the inhabitants of the east eat it after this process as a vegetable, or in soups and messes of pottage.

The wide and multifarious application of this plant to purposes of domestic utility results from the nature of its woody crust, which is at once light, tough, and durable; the bitterness in all probability protects it from the attack of insects, and thus the wisdom and goodness of God is seen even in its noisome and disagreeable savour. That playful variety of form and magnitude, so remarkable in the calabash, renders it fit for all kinds of uses. Sometimes we have a globular base, terminating in a long neck, and then it answers the pur-

pose of a bottle, and the American fastens it to his girdle, or the pommel of his saddle, when about to pass through regions which abound not in water. It has all the advantages of a glass bottle, for it communicates no taste to the water, without the disadvantage of a liability of being broken. If the wearer pleases, it may be variegated with black touches, according to his skill and taste, which, being upon a ground of a light bay or brown, may be rendered very pleasing. This process of beautifying the calabash was formerly pursued to a very great extent in the Sandwich Islands. With the addition of a little art, the traveller is provided with a "cruse" for water, embracing all the qualifications of comeliness and convenience. When a calabash is cut asunder, it forms a vessel for holding water, or a drinking cup, according to its size; we have seen some that would hold ten or twelve gallons when prepared in this way, and hence they served the Sandwich Islander with a capacious "cask" for storing up his *poe*, or native porridge, and the American Indian with a cupboard for laying up his *tortillas* or unleavened cakes. To enumerate all the uses to which the calabash is applicable, we should have to mention almost every item of domestic economy, in countries where earthen vessels are not at all, or only sparingly used. In regions which do not yield a clay proper for the manufacture of crockery, the calabash is a substitute, as if sent on purpose by a kind Creator, to compensate the deficiency which arises either from an absence of the material, or an ignorance of the convertibility of certain kinds of clay into vessels for use, by means of moisture to render them plastic, and heat to harden. The goodness of God pervades all the parts of his dominion, and is not only obvious in those instances which have an air of sublimity and grandeur, but also in those little unostentatious circumstances, where the well-being of his creatures is consulted in a manner so exactly proportioned to their wants.

The practical uses of the calabash ought not to be touched upon without hinting at one of those applications which may to some appear supernumerary; for the calabash is on some occasions transformed into a musical instrument. The Sandwich islander was wont, ere the missionary had taught him a better lesson, to take one of the smaller kinds, bore a hole or two in it to serve for ventages or air holes, and with

this bear a part in those choral festivities, which, in days of darkness, were celebrated in honour of his wooden deities. The writer purchased two of these while on a visit to the Polynesian islands, but the temptation had greater weight with a servant than the commandment, "Thou shalt not steal," for when the chest in which they had been packed was opened, the melodious gourds were sought for in vain. Though their diapason or compass was confined to two or three notes, the sound was soft and pleasant. Here then we have a calabash converted into a wind instrument, which leads us to mention another appropriation of the musical kind, which we met with in the island of Pitcairn, whither the mutineers of the *Bounty* took refuge. After the writer had entertained the natives one evening with his violin, they were pressed by some of his companions to give them a specimen of the Tahitian chorus. On which, one of the males fetched in a piece of wood (*Hibiscus*) which he laid upon two others, that answered the purpose of bridges, while a woman made a deep slit in the side of a large calabash. Our hopes of amusement were not raised at the sight of such a preparation; but though the former was beaten with two sticks, and the latter only with the hands, with an alternating motion, the effect was singular, and the ear could not help being pleased, though the hearer might be half ashamed to acknowledge it. People so much accustomed to join the idea of music with a succession of melodious sounds moving up and down the scale, can hardly be persuaded that so much delight can be communicated merely by rhythm without any variation of pitch. But in the face of all those advantages, which education and an intercourse with enlightened associates can afford, the polished traveller is often astonished and instructed by the performances of an untutored Indian, and is thus made to learn a lesson of humility, where he expected to be a preceptor alone.

We have thus glanced at the varied uses of the calabash, as a servant in the necessities of life, and we wound up our cursive survey by noting its advancement as an instrument of music. Should the reader find as much pleasure in perusing our account as we have had in drawing it up, we shall neither of us lose our labour.

L.

"AND THEN I WILL ENJOY MYSELF."

SUCH is the declaration which often arises to the lip, and not unfrequently secures an emphatic utterance. It is adopted by persons of both sexes, of all ages, and of every grade of human society. It refers to gratification which is not present, but prospective, and intimates that it is calculated on with the utmost confidence. It is not difficult, however, to detect the errors which abound in this common saying. One appears, for instance, in the objects with which enjoyment is associated. They may sparkle, but it is only with a meteoric light; their lustre is but momentary; the instant of its appearance is immediately followed by that of its extinction. Facts, the most clear and decisive, establish these remarks. The writer well remembers an eminently pious and intelligent lady, who had mingled in scenes of fashionable splendour and gaiety, telling him, that on returning from them she had often said to herself, under a deep and painful sense of their vanity: "So they call *this* happiness!" The testimony of Lord Chesterfield to the certain disappointment of all who seek enjoyment from mere worldly good, has long been before the world. Nor should that of Lord Byron be forgotten; when, as the possessor of genius, rank, and fame—after which there are so many ardent aspirations—he acknowledged to Moore, that though in company with intimate friends he appeared joyous, he was "at heart one of the most miserable wretches in existence."

But even when the vanities of the world are not pursued, the feeling of independence indicated by the declaration, "I will enjoy myself," is by no means warranted. There may be in prospect a retirement from the smoke and noise of cities to the quietude of rural life, or to the scenes of beauty and sublimity by which it is often embellished and rendered peculiarly attractive. But these have no human origin; the utmost power of man would fail to add an atom to the lovely or the overwhelming landscape; all the joy it yields comes from that God, "who spake, and it was done"—who commanded, and the world was created; and who also gave the eye to see, the mind to understand, and the heart to thrill and glow.

We reach a similar conclusion, if there be a reference to the pleasures of social

intercourse, apart from any of those lawless indulgences by which it is corrupted. The individual may enter the circle to which he has looked with intense desire, but one seat may be empty, and the unlooked-for vacancy may engulf, as it were, all the enjoyment anticipated from that visit. Some calamity may occur, as the loss of property, or of a beloved relative or friend, and the scene of expected gratification may be changed into one of gloom and sorrow; or admitting that the reality to be enjoyed surpasses the conceptions of a sanguine mind, even then a slight pressure of care, or of indisposition, will destroy the charm. Enjoyment here is dependent on the dispensations of Divine Providence; it may be conferred with a bounteous hand, or it may be altogether withheld.

Equally manifest is it that no exception can be made, when there is this calculation on it in connexion with the exercises of religion. It is true that

"A glory gilds the sacred page,
Majestic like the sun;"

but let the influences of the Holy Spirit be suspended, and instead of that glory there is only "a dead letter." At the mercy-seat the soul has delighted itself in communion with God, but that was only because while the command, "Draw nigh unto me" was obeyed, the promise was fulfilled, "I will draw nigh unto you;" in other circumstances, there would not have been "a drop of real joy." In receiving the Lord's Supper, there has been a delightful anticipation of "the marriage-supper of the Lamb;" but did this arise merely from the bodily presence of the disciples of Christ—from the eye of sense gazing on the broken bread and the poured-out wine? No. But from the visit of the Founder of the feast. He came and said, "Eat, O friends; drink, yea, drink abundantly, O beloved," and then—*then*, the house of God was the gate of heaven.

Let the remembrance, therefore, be constant, that "*to enjoy is the gift of God.*" Without Him in the world, there can be no happiness; while he who most fully and practically recognises his dependence, will drink the largest and purest draughts from "the fountain of living waters." The irrevocable word has gone forth, "Them that honour me I will honour." W.

OLD HUMPHREY ON TWO ERRORS.

IF a man were able and willing, now and then, by tearing open his waistcoat, to show what was passing in the heart beating beneath it, it would save some people a good deal of trouble.

Sometimes it is an easy thing to pour out my meaning on the page spread before me; but at other seasons there is more difficulty in doing it than in getting at the contents of a well corked bottle. When the thoughts come and the words come together, 'tis more like harmonious and spirit-stirring music than any thing else. At the present moment, I feel in a sluggish mood; it may be that I shall brighten up as I proceed.

It becomes every one, and especially every one professing Christianity, to show great forbearance towards an offending brother. "Thou art inexcusable, O man, whosoever thou art that judgest: for wherein thou judgest another, thou condemnest thyself; for thou that judgest doest the same things." But, notwithstanding this injunction of Holy Writ, and notwithstanding the duty of forbearance which we ought to practise, when a man sets up his own errors as a target, he has a right to play the part of a strong bowman; to draw his arrow up to the head, and to drive the shaft right home to its mark.

Now I seldom take aim at another's breast, without a feeling consciousness of my own frailty and infirmities; it is so in the present instance, and therefore I shall not spare.

Among the ten thousand errors of the heart, ay, of the Christian's heart, there are two that I wish to particularize in my homely way; the one is, the disposition to think too highly of mere works; and the other, the disposition to think too highly of a mere profession. He who hopes to go to heaven for his good works, and he who expects to go there for his Christian profession, may shake hands; for the one is as deep in the mud as the other is in the mire.

It is not often that I venture on a subject like this, and I feel now a little out of my depth; I feel as I suppose a man does who is poaching on another man's manor. This is a subject more fit for the ministers and stewards of heavenly mysteries to handle, than for me; but as it is full on my mind, let me be indulged in a few observations.

It is but a sorry picture to see a man who knows that he is indebted to the

Lord of life and glory for all his possessions, bodily and mental, temporal and spiritual; it is but a sorry picture, I say, for such a one to imagine that the fag ends of his time, and the fragments of his possessions are, of themselves, of such value in the sight of God, as to entitle him to the Divine favour. As well might the beggar, who has been well fed, claim merit for the return of a few of his broken victuals to his benefactor.

It is a good and a glorious thing to know, to feel, and to acknowledge, that our heavenly Father has a just claim to all we possess of time, talent, and worldly goods, and right grateful should we be for every opportunity afforded us of proving our love to Him "who hath loved us, and given himself for us." And if such proofs of our reverence and love are mercifully accepted, we have indeed reason to rejoice; but to value ourselves in giving niggardly to God of that which he has given bountifully to us, is a proof that we are spiritually void of understanding. It is not, however, the error, great as it is, of thinking too highly of our mere works, that I wish to speak of, so much as the error of thinking too highly of our mere profession; let me, then, dwell a moment on this latter subject.

Say what we will, it is impossible to separate Christian faith from Christian duty: the latter springs as naturally from the former, as the clustering grape from the spreading vine; true Christians and true vines have the same marks set upon them. "By their fruits ye shall know them." All true vines are not equally productive, neither are all humble-minded Christians; for to one two talents only may be given, and to another ten; but, again I say, that vines and Christians that are good for any thing must bear fruit.

We sometimes hear boasts of men being holy and heavenly-minded, who withdrew themselves from the world, dwelling apart from society, either amid desert wilds, or in the gloomy walls of a monastery. Now I am sadly afraid that such supposed sanctity and heavenly-mindedness as this, savours more of earth than of heaven; more of selfishness than of self-denial. I am quite of opinion that the disposition to shut ourselves up, and to shut others out, under the plea of becoming more holy, and offering up a more acceptable sacrifice to

God, is either the suggestion of a self-righteous and proud heart, or the delusion of a weak mind. Indeed it must be so, if the Bible, the blessed Book of truth, is to be relied on; and when that ceases to be our trust, our hopes will be altogether without foundation.

Holy men and holy minds may love seclusion, and, for a season, retire with advantage from the bustle of this busy and light-hearted world; but they fail not to come back again, and leave not their duties unperformed. They must do justly as well as love mercy, and walk humbly with God. They must "visit the fatherless and widows in their affliction," as well as keep themselves "unspotted from the world."

Did the patriarchs, the prophets, and the apostles abandon their fellow sinners, to waste in solitude the energies that God had given them? Did the holy army of martyrs excuse themselves from the painful part they had to act in the eyes of the world? No! The one and the other passed their lives in active duties. The Saviour of the world "went about doing good." Show me an angel, and I will show you "a ministering spirit." Show me a saint, and I will show you an encourager of sinners to seek salvation, and a doer of good. The language of the lip, the outpourings of the heart are costly things; but active benevolence to man, emanating from a proper motive, is the very soul of thanksgiving to God. What says the Saviour of the world in his description of the last judgment? "Verily I say unto you, Inasmuch as ye have done it unto one of the least of these my brethren, ye have done it unto me."

Up, then, my friends, and be doing; let your Christian profession bud and blossom, and bear fruit; for without it, it has no more life than the sculptured marble that personates a breathing form. We all talk too much, and do too little. Oh for more Christian affection and brotherly kindness one towards another, and more self-denying godly sincerity in the cause of our Lord and Master.

The poet, who talks, writes, and dreams of philanthropy, without ever entering the abode of poverty, or bestowing a farthing on the afflicted; the politician who vapours about the rights of the people, declaiming against tyranny and injustice, yet never bettering the condition of a poorer neighbour; and the devotee indulging in beatific visions,

without practising the duties which Christianity enjoins, are but the shadows of what they affect to be.

Up and be doing, I say: there is a healthy activity in true piety, that is equally opposed to vainglorious works and fruitless profession. If we have no other than worldly objects, it matters but little whether we be monks or mountebanks; but if we really are looking for a better inheritance, we must profess His name who died for us; we must show our sincerity by thankfully doing his will; and we must depend alone and unreservedly for life and salvation on our crucified Redeemer.

MOUNTAINS.

It is to the existence of mountains we owe the springs and the rivers so essential to all life; and even, in a great measure, the very rains by which they are fed, and through which vegetation exists. It is very widely through the influence of mountains or elevated lands, that the clouds are caused to fall in rain; and here also we may remark the subsidiary provision made by this law. Such lands become speedily drained and quickly dried, to the obstruction of their vegetation; and it has thence been ordered that the vapours should collect especially upon and around them; while in thus primarily supplying themselves with the needful moisture, they also effect its distribution far and wide, through the aid of the winds.

If philosophy has not yet proved that electricity is here the immediate agent, it is easy in any mountainous country, to witness the operation of a mountain, not merely in collecting the existing clouds, but in forming them from an atmosphere apparently free of all moisture. A transparent current of air begins to deposit vapour, as soon as it approaches the summit, increasing till the whole becomes involved in a cloud, as low down as the relative specific gravities of this vapour and the air permit. Often also such a cloud appears to be fixed, though a strong wind is blowing: but in this case, that which had been precipitated on the windward side, is dissolved on the leeward, explaining the apparent mystery of rest in the midst of motion. But the more frequent result is progressive addition to the cloudy atmosphere, until the whole sky is obscured

and descends in rain. And thus, also, when the high land simply attracts the clouds which may be sailing through the air, its influence becomes a frequent source of rain, not on itself alone, but on all the surrounding country.

But the wisdom of this provision will be rendered more impressive, by considering those parts of the earth where extensive plains refuse almost all vegetation; while the contrivance for watering such countries through the winds, does not affect the general deduction. If we look at the great, arid, and almost barren deserts of Asia and Africa, it is but true that they only require mountains to render them what the equally extensive plains of South America are. Could we erect Chimborazo, or Etna in the Sahara, a wide tract would immediately become fertile; since, sands as these plains now are, and barren as they may be, nothing is wanting to them but water. The rock is that of Cheshire, and the soil is essentially the same: it requires but a succession of vegetation to render it, not merely as fertile, but a thousand times more productive. Or, in as far as its barrenness may arise from the presence of salt, the cause of its brackish though rare waters, the rains of a few years would wash that far away from the lands, and convey it to the sea.

And if there are means by which Providence is daily enlarging the extent and increasing the fertility of the land, it is easy to see, that in one year, in one day, and by means through which he is ever producing vast and similar effects, he might convert, not the Sahara alone, but every desert on the globe, into habitations for man: render the sands of Africa what the declivities of the Atlas are, and cover the salt plains of the Caspian with the wealth of Caucasus. The volcano is the power in his hand. He has employed it in the Southern Ocean almost before our eyes; but it has ever been his agent in this work, since thus did he form the hills, and build the mountains; and by the volcano, terrific as is its power, and destructive as it may seem to those who do not scan his ways, might he produce a new world in the wilderness, for the ever-enlarging races of man. And who can decide that this is not within the Creator's plan?—*Macculloch on the Attributes of God.*

CHURCH-YARDS—ITALY.

If there be any place where we feel the insufficiency, not only of worldly possessions, but of worldly fame and reputation, surely it is where we are surrounded by the records of mortality, and reflect that, were it possible for men to revisit this earth, many would deprecate the homage they so ardently aspired after while living. How few of those whose memories are held in respect, have really been actuated by the sincere desire of benefiting their fellow-mortals and fellow-sinners, or by any other worthier motive than selfish ambition! We deify genius; when shall we learn to honour virtue? When shall we acknowledge that real greatness and real goodness are one? Alas! we make even the grave itself minister to our earthly affections and carnal delusions, and cry out, Peace! peace! when there is no peace; we pamper our imaginations with vain gauds,

On quicksands build, and trust to broken reeds.
What avails to "Dives" his costly tomb, or the parasitical applauses of the world? Surely the despised Lazarus hath the better portion; and many are the Lazari of whom the world recks not, because while living they neither flattered the world, nor made themselves friends with, nor obtained any share of the honours it bestows. Yet more than all its honours, its triumphs, its pleasures, shall be their exceeding great reward.—*Rae Wilson.*

THE PROPER OBJECTS OF DELIGHT.

WE may not take delight in that which is evil, either in the present act, the remembrance of the past, or the anticipation of the future; such as unhaste thoughts, the expectation of revenge, or the calamity of our enemies. Sin is the transgression of the Divine law, and it is the bane of the soul, the disturber of inward peace, the only thing that robs God of his glory, man of his dignity, and the soul of beauty; it cannot minister content except to such as take pleasure in their own shame. Both beasts and men are carried with an insatiable desire after delight, as daily experience testifies. But God is the paradise of pleasure, the delight of delights. In his presence there is fulness of joy for evermore. How kind, condescending, and gracious, then, is his invitation to those that love and fear his name! "Delight thyself in

the Lord; and he shall give thee the desires of thine heart," *Psa. xxxvii. 4.* It is a mistake to suppose that all the treasures of honourable, virtuous, spiritual, and divine pleasures and delight, are reserved for the saints in heaven: even in this barren wilderness, this troublesome world, God refresheth the souls of his people, with spiritual manna and sweet streams of consolation. For, what are those admirable comforts which his children feel in the depths of their adversities, endured for the gospel's sake, but as rivers of water in a dry ground? What do those secret joys denote, which proceed from a good conscience grounded upon a confident hope of eternal life? Are they not those clusters of grapes showed unto them as significant of the fertility of the promised land, the heavenly Canaan? What else can the sweetness of fervent prayer prognosticate, but a blessed anticipation of that felicity which the faithful shall enjoy in fellowship and communion with God through the countless ages of eternity!—*Ball on a Godly Life.*

THE GREAT WALL OF CHINA.

DURING the life-time of the Tsin ruler of Tsin, the famous Chinese wall was erected, in order to keep out the Tartars, who then infested the northern frontier. Almost every third man was drafted throughout the empire, for the accomplishment of this undertaking; and being but poorly supplied with provisions, many of them died in the work. Hence the Chinese call it, "The ruin of one generation, and the salvation of thousands." However true the first part of this sentence may be, the latter is not so exactly correct, as the Tartars have several times invaded China, notwithstanding their wall, and are now in possession of the empire. Still it is a stupendous work, stretching over fifteen hundred miles of country, crossing hills and rivers, and provided with gates and towers, at certain intervals, so that if well manned and guarded, in a country where artillery is seldom employed, it might still be serviceable in keeping out an enemy, were not the dreaded Tartar hordes now on both sides of the wall, and in possession of the palaces and capital of the empire. The name of the first ruler of the Tsin dynasty is, however, held in detestation by the Chinese.—*Medhurst's China.*



Friar-street, Worcester.

WORCESTER.

THE city of Worcester is very pleasantly situated. A large part of it occupies the elevated ground extending from north to south, rising gradually from the eastern bank of the Severn, which there becomes a river of the first magnitude, and over which is a handsome stone bridge with five elliptical arches. The approaches exhibit rich and beautiful scenery which, in many places, is greatly diversified and strikingly picturesque. Bromsgrove Lickey to the north-east, the Malvern hills to the south-west, and the Shropshire hills and Welsh mountains in the distance, are finely contrasted with the windings of the Severn, and the luxuriant vales, orchards, hop-grounds, and meadows, for which the surrounding country is distinguished.

Worcester is of great antiquity, and is mentioned by Nennius, in his catalogue of cities belonging to the Britons, by whom it was selected as a place of strength and security; it was then near a fordable part of the Severn, and on the confines of a thick forest. On the expulsion of that people by the Romans, it was retained, with other towns,

MARCH, 1839.

by the conquerors; and if it were not, as some have supposed, one of their principal stations, it became very probably one of the fortresses erected on the banks of the Severn, to secure the conquests gained on that side of the river.

The cathedral is supposed to have been founded by Ethelred, king of Mercia, so early as the year 680; but it was destroyed by fire, and two others, which successively arose from its ashes, shared the same fate. The present one is built in the gothic style. Henry III. attended the ceremony of its consecration with all the pomp of his court, and thus marked his respect for the place where his father, King John, was buried. The whole was completely repaired in the fourteenth century, principally at the expense of Bishop Wakefield, who may be considered its second founder. Its front is remarkably simple, and free from ornament, but its interior is richly adorned with every species of sculpture. Its plan is that of a double cross, and its nave and aisles are greatly admired for their noble proportions and solid architecture.

The ancient hospitals were chiefly

intended for the accommodation of pilgrims and poorer travellers on their journeys, and with this view, they were built by the sides of great roads, and near the entrances of towns. In each of these erections, a few poor men were stationed and handsomely paid out of the revenues of the foundation, that they might discharge the offices of hospitality. Worcester had several establishments of this kind. Friar-street, of which an engraving is given, derives its name from the house of the Grey Friars, which was situated at the north end of it. Of this monastery, not a vestige now remains. It was used as a prison for many years, but was taken down in 1823. The houses in this street afford very interesting specimens of the style of domestic buildings in towns and cities, prior to and during the time of Queen Elizabeth. The timber frame-work, filled up with mortar and rubble or bricks, the lath and plaster walls, the over-hanging stories, the high-pitched gables, the latticed windows, and the rude and grotesque ornaments in the brackets, are so many evidences of the practices of our forefathers in their town buildings.

The manufacture of broad-cloth prevailed in Worcester to a very great extent, in the reign of Henry VIII.; at which time there were three hundred and eighty looms, employing eight thousand persons. On its decline, the carpet manufacture was introduced, which, after flourishing for a time, was transferred to Kidderminster. The present manufactures are those of gloves and porcelain. The latter has obtained a degree of reputation, which is not surpassed either at home or abroad; being equally valued for the fineness and transparency of its material, the elegance of its patterns, and the beauty and taste of its decorations. It was established by Dr. Wall, and some other proprietors, in 1751, and its progress was both rapid and successful.

In the manufacture of pottery and porcelain, the hard substances, as flints, are usually burned in a kiln, and then thrown red-hot into cold water, which renders them very brittle. They are afterwards ground in a mill; the stones of which are exceedingly hard and without any carbonate of lime in their composition, because this substance being rubbed off, would injure the ware. A small quantity of water is used to faci-

litate the grinding, and also to save the workmen, who would otherwise breathe a portion of the flint, which, however finely powdered, still consists of little angular pieces, likely to injure the lungs and produce pulmonary disease.

That the clay may be mixed with the proper quantity of water, it goes through an operation called bludging. As it does not receive enough water in the first apparatus, it is conveyed into a second, when it is violently shaken for a long time, the grosser sediment being allowed to settle, and the finer part, about the consistency of cream, passed through a succession of sieves, ending with very fine ones; after which it is prepared to be mixed with the other ingredients.

The prepared clay and the prepared flints, are used in various degrees of thinness, in different manufactories, but they are supposed to be in due quantities, when of equal measures of them, the clay weighs in the proportion of three, while the flint is in that of four; and the usual consistency is a pound and a half for a pint measure of the clay, and two pounds for an equal measure of the flint. To distribute the two earths uniformly through the whole mass, they are passed repeatedly through sieves. The result, called slip, is evaporated in a kiln or boiler to the proper consistency, and is then carefully kneaded, to remove all bubbles of water or air. When about to be used, the material is again worked in the same way, that the incorporation of the mass may be more complete.

When the material is properly prepared, which at Worcester consists of fifteen different materials, chiefly white granite and steatite from Cornwall, the next operation is to form it into the articles required. The process begins with the use of the potter's-wheel, of which we hear in very early times. This simple wooden machine consists of an upright shaft, on the top of which is fastened a circular piece; both of which are made to revolve very rapidly, by means of a wheel. Seated with this machine before him, the workman puts some of the material on the circular board, and this being set in motion, he proceeds to give the substance the proper shape. In many cases, he does so chiefly by his hands, which he dips from time to time in water, to keep the clay he thus moulds from sticking to them; but in others, he uses pieces of

wood, called profiles or ribs, which being held firmly against the material while constantly kept in motion, give it the wished-for appearance. When the inside as well as the outside has been carefully formed and smoothed by these means, the vessel is easily cut from the board by a thin brass wire; it is then lifted off, and placed on a shelf, where it is left to dry partially, before any thing further is done. It is afterwards shaped more nicely in the turning lathe; and if it is to have a spout or a handle, that part is next put on.

In making circular dishes, plates, saucers, and other vessels of that class, a plaster mould is used. This having been sprinkled with finely-powdered porcelain, is placed on the circular board, already described as surmounting the upright shaft, and the machine being set in motion, the material is first fashioned by the hand, which presses it against the mould, and afterwards by a profile, to give it the proper form. When sufficiently dry, the edges are pared with a sharp knife, and the pieces are slightly polished by the hand. They are then placed together in piles, and left to harden, prior to their being put in the oven.

To Messrs. Flight and Barr, of the city of Worcester, we are indebted for an ingenious invention, which greatly extended this manufacture. They confined themselves, at first, to making blue and white ware, but they afterwards determined on transferring the impressions from copper-plates to the inferior articles; a method which, as it arose with them, was long confined to their establishment. The pattern, a landscape for example, having been engraved on copper, the colour, which is mixed with boiled linseed oil, is laid on it, as ink is by copper-plate printers. To increase the fluidity of the oil, the plate is placed for a short time in a stove, a sheet of damp tissue paper is then laid over it, and both are passed through a press. The paper, wet with the colour, is afterwards delivered to a girl, who cuts away the blank part which surrounds the pattern, and passes it to another, by whom the impression is applied lightly to the vessel, on which it is to appear. A third girl is next employed, who, with a piece of woollen cloth, rolled up tightly, rubs the paper closely against the vessel, in order to press the colour sufficiently into its substance.

The paper thus rubbed, is left sticking to the article for an hour, when both are placed in a cistern of water, so that the paper, having transferred the impression, may be easily peeled off from the vessel. When dry, it is placed in an oven, that it may be prepared for the glaze, which is transparent, that the pattern it has received may be distinctly visible.

Vessels of porcelain or china, as they are often called, are frequently adorned with beautiful or splendid paintings; these are executed in the usual manner, by skilful artists. Gilding also resembles the usual processes. Circular lines of gold are easily made. The article intended to receive them is placed firmly on a small table, which the artist causes to turn round with his left hand, while he holds his brush, dipped in gold, steadily with his right against the vessel; and thus it receives the circles with the greatest facility and correctness.

Gold is, of course, applied in the metallic state, but colours are also prepared from gold precipitated from its solution in nitro-muriatic acid, by tin or ammonia. If tin be added, the colour is purple or violet; and when ammonia is used, the colour is a bright carmine red. In the latter case, the dry precipitate is an exceedingly dangerous preparation, even when used in very small quantities; being that violently explosive powder known by the name of fulminating gold. If even the fraction of a grain be exploded, it is highly dangerous.

The last process, that of burnishing, is usually performed by females. The person so engaged, holds the vessel in a piece of clean white linen, and applies a tool of agate or blood-stone, lightly to the gilding; following carefully all the ornaments, and never rubbing in cross directions, lest they should be scratched. A little vinegar or white lead is occasionally used to clean the surface, and is then removed with a soft linen rag. The burnishing is continued until the vessel appears in its highest beauty. Every piece passes through twenty-three hands before it is finished.

About half a century ago, large quantities of these articles of comfort and luxury, continued to be regularly imported from the royal china manufactories of France; but a few years after that time, such improvements began to be made in the texture and decoration of the Worcester ware, as greatly

to diminish them. In its production King George III. took a lively interest, and, on his advice, Messrs. Flight and Barr opened a repository for the sale of their china in Coventry-street, London, which continues to the present day. Other manufacturers have since attained distinction.

The principal warehouses and workshops in Worcester are open to public inspection; and the visitor may observe the whole process from the first working of the clay to the finishing of the most elegant productions of this interesting art. One traveller mentions his being shown a set of coffee-cups, making for the Grand Signior, representing the battle of the Nile; each of which was valued at ten guineas; and yet, he remarks, such was their surpassing beauty, that the price appeared moderate.

W.

"I AM THE WAY, AND THE TRUTH, AND THE LIFE."

It is midnight! Yonder is an individual wandering in deep darkness, and groping his way amid pits, or quicksands, or precipices, with no voice to direct his footsteps, with no light to shine upon his path. Trembling has taken hold upon his limbs, and fearful anxiety attends his every movement; for his way is lost, and at each successive step he knows not but that the very next may dash him on unseen rocks, or plunge him to depths from which he shall rise no more. What to that man would be the most delightful of all sights, the most cheering of all sounds? It would be the sight of that light which should beam upon his path, the sound of that voice which should proclaim to his desponding, trembling spirit, "*This is the way.*"

There, again, is a sincere inquirer after truth. He is living, not under the light of the gospel, but in heathen lands. The deep darkness of ancient superstition surrounds him. A vast amount of idle customs, and antiquated absurdity, and consecrated prejudice, weighs down his mind, and shackles every generous aspiration, and crushes, as with a leaden weight, every attempt at original investigation. Like some of our ancient philosophers, he is perplexed and confused, by the various specious systems demanding his belief; now almost convinced by this, now by that, now doubting all, and

now again wavering between discordant views; and thus going on from darkness to darkness, until in an agony of suspense, he is almost ready to lie down in the despair of utter scepticism. With what ineffable joy would that man hail the voice that should echo to him from heaven the declaration, "*Here is the truth*;" especially if his search had been for divine truth, for truth relating to the soul!

A traveller has gone to a foreign land, and when far from his country, and friends, and home, his course is arrested by a dangerous and raging disease. He is alone, and a stranger, and in the wilderness or in the desert. No one is near to sympathize with him in his sufferings, or to minister to his wants, or to soothe his anguish. There is no friendly voice to whisper comfort to his heart, no kind hand to wipe away the gushing tears. There is not beside him even one solitary being to make known to his friends the tidings of his death, or to bear to them the last message of his dying affection. Add to all this, that he now remembers the instructions and prayers of some pious mother, and how in contempt of them all he has broken away from the path of duty; that he now feels himself a guilty sinner, and thinks that he has so long neglected the calls of God that it is too late to hope for salvation; that he sees before him nothing but endless and remediless despair! And now death begins to steal upon him. He knows it, he feels it, and the measure of his agony is full; for beyond the grave he has no hope, no prospect of heaven. Oh! with what joy, with what rapture, with what ecstasy, would the ears of that poor sufferer drink in the sound from the skies, "*I am the life*,"—*life to your body, life to your soul!* Children of earth, we are the individuals who have been described. We are wanderers amid the graves of the world, and the pitfalls of temptation, and the quicksands of guilt, liable at any moment to fall to our own ruin; and the *way* is pointed out to our view. We are surrounded by error, and exposed to its various delusive deceptions; and the *truth* is plainly set before us. We are the victims of spiritual sickness, dying of the wretched disease of sin; and *life* is offered to our acceptance. Yes, wanderer from the path of holiness, and duty, and heaven, *Jesus is the way!* Searcher after realities which are worthy of your trust,

perplexed, perhaps, by the waves of error and doubt, Jesus is *the truth*! Dying mortal, ever walking on the verge of death, Jesus is *the life*—life which is eternal! Realizing our own true character and condition, our deep destitution, our perishing necessities, with what heart-felt gratitude and joy should we hail the voice which comes so sweetly to our ears, proclaiming in accents of mercy from the very throne of God, “I AM THE WAY, AND THE TRUTH, AND THE LIFE.”

TRYON EDWARDS.

EARLY RISING.

THE adoption and continuance of habits of early rising, are alike attended by considerable difficulties. Much is undoubtedly accomplished when sleep is dismissed at an appropriate hour of the morning; but continued, and perhaps greater effort will be needed after an interruption of such a course by the attacks of disease, or by circumstances productive of extraordinary weariness. In the hope, therefore, of inducing some to begin well, and others to honour a good commencement by subsequent progress, the writer now proceeds to offer the following observations.

And at the outset it should be distinctly stated, that lying late in bed is productive of many and great evils. Some, for instance, are *physical*. “Nothing,” says the eminent Dr. Cheyne, “can be more prejudicial to the tender constitutions of studious and contemplative persons, than lying long in bed, lolling and soaking in sheets, after any one is distinctly awake, or has slept a due and reasonable time. It necessarily thickens the juices, enervates the solids, and weakens the constitution. A free open air is a kind of cold bath, especially after rising out of a warm bed, and consequently makes the circulation brisker and more complete, and braces up the solids; when lying in bed dissolves and soaks them in moisture. This is evident from the appetite and hunger those that rise early feel, beyond that which they get by lying long in bed.”

It was the opinion of John Wesley, whose life was one of unusual activity,—an opinion formed from the nervous weakness of his sight in his early days, and its great strength to the close of his life,—that lying in bed, or sleeping too long, is injurious to the powers of

vision. Nor would it be difficult to mention other cases in which the practice is stated by high authorities to be detrimental. Such is manifestly the origin in some instances, and the means of sustaining in others, the maladies now called *nervous*. It is said that a sire of earlier times remarked with thankfulness, that he was born “before nerves were in fashion;” and doubtless, he and his robust contemporaries were not chargeable with the indulgence now under censure. They owed, in a great degree, the vigour of their frames, and the cheerfulness of their minds, to the moderate use of sleep. A similar cause tends also to the recovery of health, after its suspension, as is evident from the case of a young lady afflicted with nervousness. She was reduced to such extreme weakness, as to require assistance in walking across the room, and supposing that so enfeebled a state rendered a larger portion of sleep necessary, she generally lay eight or nine hours, but she found herself as relaxed and fatigued in the morning as at night, and unable to dress without stopping two or three times for relief. But reading Wesley’s sermons on early rising, she was so much impressed by his reasoning, that rising gradually earlier every morning, she soon reduced the time of slumber to six hours. Her strength in consequence daily increased, and persevering in the practice, together with cold bathing, and moderate exercise, the disorders by which she had so long been afflicted, were removed, and but one regret was felt—that so beneficial a habit had not been formed at a much earlier period of life.

The *mental and moral* evils of late slumbers demand still more and bitter lamentations. Instead of the intellectual powers being raised to their due elevation, and prepared for vigorous and persevering effort, they are grievously depressed and proportionately feeble. So far from reminding us of the chords of a well-tuned harp, they resemble that instrument when altogether unstrung. The enervated frame, too, impresses its own character upon the mind; and as the deteriorating process is continued from day to day, there is a gradual or rapid decline towards abject imbecility.

In the meantime there is much of personal disquietude and suffering. The morning at least, sometimes commences with painful reflection on the character

and consequences of a vassalage, to terminate which no proper effort is made. The dissatisfaction inevitably produced, casts a melancholy hue on surrounding scenes and persons. In the possession of ample means, enjoyment may thus be utterly unknown, and even wormwood be cast into the sweetest cup of domestic or social life. There is also, perhaps, a sense of unfitness for ordinary engagements, the cause of many "compunctious visitings," and these occur again and again, until an admonitory voice within is heard no more, and the very conscience becomes seared.

For let it not be overlooked, that in such circumstances little or nothing can be known of communion with God. The declaration may be ventured on from a knowledge of the attention demanded by ordinary avocations—that if there be not early rising, the religion of the closet, without which that of the family and the sanctuary is vain, is almost sure to be neglected. It would manifestly be egregious folly to sacrifice the soul for an empire or a world; but what words shall describe the infatuation of ruining it from a love of slumber?

The evils arising in this instance, as in a multitude of others, are very rarely, if ever, confined to the individual. It must always be otherwise in reference to families. Servants are not found to rise early when occasional precept is utterly contradicted by habitual example; and children inevitably catch the contagion. Many domestics who are now pests, might have yielded much comfort, but for their wretched self-indulgence and its invariable evils; and many a nervous being merely vegetates, who would probably have enjoyed health and strength, had he in childhood inhaled the balmy air of the morning; but of this he was robbed, by the setters, or imitators, or both, of a most pernicious example.

The effect of a reference to the physical, mental, and moral evils of late slumbers, may now, it is hoped, be further increased, by a few out of many examples of an opposite character. Such means are commonly considered as very powerful. For if, to avoid some danger, I must climb a steep or craggy mountain, whose summit appears inaccessible, or to gain a valuable end, I must pass through a lone and dreary desert, the sight of those projections, to which some human hands have clung, or of some

foot-prints on the soil, the memorials of past success, will produce a new and powerful stimulus. Well, therefore, will it be if the instances now to be enumerated, should occur to the mind amidst the temptations of the morning, averting the evils of self-indulgence, and conferring the benefits attendant on self-denial.

Pliny describing to Fuscus the manner in which he disposed of his time at Tuscum, says: "I rise just when I find myself in the humour, though generally with the sun; sometimes, indeed, sooner, but seldom later." Sir Thomas More usually rose at four, and yet he remarks in his preface to the *Utopia*, that he had completed that work by stealing from his *sleep* and his meals; and so well satisfied does he appear to be with the habit, that he represents the Utopians as attending public lectures every morning before daybreak. Buffon remarks, that to his domestic servant Joseph, whom he rewarded to accustom him to rise early, he was indebted for ten or a dozen volumes of his works. Dr. Doddridge says, in his exposition of the thirteenth chapter of Romans and thirteenth verse, "I will here record the observation which I have found of great use to myself, and to which I may say that the production of this work, and most of my other writings is owing; that the difference between rising at five and at seven o'clock in the morning, for the space of forty years, supposing a man to go to bed at the same hour at night, is nearly equivalent to the addition of ten years to a man's life, of which (supposing the two hours in question to be so spent) eight hours every day, should be spent in study and devotion. And Howard, so illustrious as a philanthropist, (see *Visitor* for Jan. 1839, p. 1,) was seldom in bed after four o'clock in the morning. We rise from these to higher examples. Of Abraham, Isaac, Jacob, Moses, Job, Gideon, Joshua, Samuel, David, Jeremiah, Nehemiah and his fellow labourers, it is distinctly stated that they pursued the same course. Genesis xix. 27; xxi. 14; xxii. 3; xxvi. 31; xxviii. 18; xxxi. 55; Exodus xxiv. 4; xxxiv. 4; Job i. 5; Judges vi. 38; vii. 1; Joshua iii. 1; vi. 12; vii. 16; viii. 10; 1 Sam. ix. 26; xv. 12; xvii. 20; Psalms v. 3; lv. 17; lix. 16; lxxxviii. 13; xcii. 1, 2; cxix. 147; cxliii. 8; Jer. xxv. 3; vii. 13; Neh. iv. 21. The Redeemer is also represented as having risen early: it was at the

break of day that he called to him his disciples, and chose of them twelve, whom he called apostles; it was early in the morning that the people came to hear him in the temple; and it was in the morning, a great while before day, that he went out into a solitary place to pray. Luke vi. 13; xxi. 38; John viii. 2; Mark i. 35. Let then these facts be weighed, and the course they sanction and enjoin be perseveringly pursued. No exception can be made in this case in favour of the studious. Of John Owen, it is said, that he pursued his various branches of improvement with incredible diligence; allowing himself, for several years, not more than four hours sleep during the night. But it is not every constitution that is able to bear such exertions; and many an individual, in struggling beyond his strength for the prize of literary renown, has procured it at the expense of his life, or of the irreparable injury of his future comfort. Owen himself declared afterwards, that he would gladly part with all the learning he had acquired in younger life, by sitting up late at study, if he could but recover the health he had lost by it. He who prefers mercy to sacrifice, requires nothing in ordinary circumstances, beyond what the human system is fairly capable of bearing.

All who are acquainted with modern literature, have been struck with the extraordinary intellectual activity of the late Sir Walter Scott; and it is worthy of remark, that the period is noticed in his memoirs, of an important change which took place as to the distribution of his time. Before, it was his custom, whenever professional business or social engagements occupied the middle of the day, to seize some hours for study after he was supposed to have retired to bed. His physician stated that this was very likely to aggravate his nervous headaches—the only malady he was subject to in the prime of his manhood; and contemplating with steady eye a course of unremitting and increasing industry, he resolved to adopt a plan which with very slender variation, he always persevered in while in the country. He rose by five, lit his own fire, when the season required one, and carefully dressed himself. At six he was seated at his desk, with all his papers arranged in the most accurate order, and his books of reference marshalled around him on the floor. Thus by the time the family assembled

for breakfast, between nine and ten o'clock, he had done enough, in his own language, “to break the neck of the day’s work.” Nor would it be difficult to mention many instances of the eminent now living, who owe a large part of their health, comfort, and success, to a similar arrangement.

Should it now be asked—How is the habit of self-indulgence to be overcome? The answer is, by immediate, gradual, and persevering effort. If life be continued, rise to-morrow morning a few minutes earlier than you did to-day, pursue this course till you have reached the hour which appears most eligible, and you will attain the object exhibited most easily and certainly. When this is done, it will occasion but one regret—that a course so advantageous should not have been *always* pursued. S. S.

JOURNAL OF A TRAVELLER IN NORTH AMERICA, BEYOND THE ROCKY MOUNTAINS.

RECONCILIATION.

September 4th, 1835. As we recede from the mountains, the climate becomes warmer. We encamped upon another tributary of the Colombia. Taituin-wa-tish, the principal chief of the Nez Percés, came to me and requested me to meet in his lodge a number of their people who had separated, husbands from their wives, and wives from their husbands, and explain to them what God has said upon the subject. I readily consented, and was the more pleased with the proposal, as it was without any suggestion from myself, but the result of his own reflections after what I had before said in explaining the ten commandments. When they were assembled, I read to them and explained what God has said about the duty of husbands to their wives, and of wives to their husbands; and of the duty of parents to their children, and children to their parents. I commented upon the subject, and told them, that when they marry, it must be for life. They all but two, agreed to go back to their former husbands and wives. It was interesting to see that they are ready to put in practice instructions as soon as received. The chief said they wish me to instruct them in all that God has said; for they wish to do right. After I left them, they stayed a long time in the lodge of the

chief, which was near my tent, and I heard them conversing on the subject until I went to sleep, which was at a late hour. They all shake hands with me when service is closed, and say the instruction is "tois," (good.)

THE NEZ PERCES.

The morning of the 5th was very cold. We continued in our encampment to-day, to give the band of Nez Perces an opportunity to join us, and about the middle of the day they came: the principal chief marching in front with his aid, carrying an American flag by his side. They all sung a march, while a few beat a sort of drum. As they drew near, they displayed columns, and made quite an imposing appearance. The women and children followed in the rear. Tai-quin-wa-tish, and our other chiefs arranged their people in the same order and went out to meet them; and when we had approached within ten rods of each other, all halted, and a salute was fired in which I had to take the lead. They then dismounted, and both bands formed into single file, and meeting, shook hands with each other in token of love, and to express their joy to see one come among them to teach them things pertaining to God and salvation. The principal chief of the other band, who is called Charle, and who is the first chief of the Nez Perce nation, is a good-looking man; his countenance is rather stern, intelligent, and expressive of much decision of character. I never saw joy expressed in a more dignified manner, than when he took me firmly by the hand and welcomed me.

In the afternoon, I took Kentuc and rode five miles to see a prominence of interesting appearance, which I found to be a mass of volcanic rocks. It is detached from the main mountain, and stands on a plain upon the east side of Coté's defile; it is about a mile in circumference at the base, and rises up abruptly, having most of the west side perpendicular. It is more than two hundred feet high, has a level horizontal summit of eighty rods long north and south, and twenty rods wide. It furnishes plain evidence of having been fused and thrown up by subterranean fires.

In the evening, I met with the chiefs and as many as could assemble in a lodge, and explained to those whom I had not seen before, the object of my mission. Charle, the first chief, arose and spoke

very sensibly for a considerable time—mentioned his ignorance, his desire to know more about God, and his gladness of heart to see one who can teach him; and said, "I have been like a little child, feeling about in the dark after something, but not knowing what; but now I hope to learn something which will be substantial, and which will help me to teach my people to do right." I told them to-morrow would be the sabbath; and explained to them the nature of the institution, and their obligation to remember and keep it holy. They expressed their desire to obey, and said they would not remove camp, but attend to the worship of God. Providentially there came to us this afternoon a good interpreter from Fort Hall, so that to-morrow we can have public worship.

A SABBATH IN THE WILDERNESS.

Sabbath, 6th. Early this morning one of the oldest chiefs went about among the people, and with a loud voice explained to them the instructions given them last evening; told them it was the sabbath-day, and they must prepare for public worship. About eight in the morning, some of the chiefs came to me and asked where they should assemble. I asked them if they could not be accommodated in the willows which skirted the stream of water on which we were encamped. They thought not. I then inquired if they could not take the poles of some of their lodges and construct a shade. They thought they could; and without any other directions went and made preparation, and about eleven o'clock came and said they were ready for worship. I found them all assembled, men, women, and children, between four and five hundred, in what I would call a sanctuary of God, constructed with their lodges, nearly one hundred feet long, and about twenty feet wide; and all were arranged in rows, through the length of the building, upon their knees, with a narrow space in the middle, lengthwise, resembling an aisle. The whole area within was carpeted with their dressed skins, and they were all attired in their best. The chiefs were arranged in a semicircle at the end which I was to occupy. I could not have believed they had the means, or could have known how, to have constructed so convenient and so decent a place for worship, and especially as it was the first time they had had public worship. The whole sight, taken together, sensibly af-

fecting me, and filled me with astonishment; and I felt as though it was the house of God and the gate of heaven.

They all continued in their kneeling position during singing and prayer, and when I closed prayer with Amen, they all said what was equivalent in their language to Amen. And when I commenced sermon, they sunk back upon their heels. I stated to them the original condition of man as first created; his fall, and the ruined and sinful condition of all mankind; the law of God, and that all are transgressors of this law, and as such are exposed to the wrath of God, both in this life and the life to come; and then told them of the mercy of God in giving his Son to die for us; and of the love of the Saviour, and though he desires our salvation, yet he will not save us unless we hate sin and put our trust in him, and love and obey him with all our heart. I also endeavoured to show them the necessity of renovation of heart by the power and grace of the Holy Spirit; and told them they must pray to God for the forgiveness of their sins and for salvation. They gave the utmost attention, and entire stillness prevailed, excepting when some truth arrested their minds forcibly, a little humming sound was then heard through the whole assembly, occupying two or three seconds.

I never spoke to a more interesting assembly. I would not have changed my audience, at that time, for any other upon earth; and I felt that it was worth a journey across the Rocky Mountains, to enjoy this one opportunity with these heathen who are so anxious to come to a knowledge of God. I hope, that in the last day it will be found that good was done in the name of Jesus. If Christians generally could have witnessed this day's service, they would have been willing to do something adequate to the necessities of these perishing souls.

An Indian boy about sixteen years old, who belonged to the band who joined us yesterday, died this morning. He was speechless when he was brought here. We attended his funeral in the afternoon. They buried him in a very decent manner, without any heathen rites, excepting that they interred with him all his clothes and blankets. I addressed the people at the grave upon the subject of the resurrection and of the judgment. This was entirely new to them, and very interesting. Tai-quin-wa-tish came to my tent toward evening, and said, what I

had said was "tois," it was spiritual, and now he knew more about God. After I had gone to rest, they sent for me to meet with them again in one of their tents.

INDIANS' MODE OF LIVING.

Monday, 7th. We travelled five hours to-day. The Indians make but slow progress in travelling with their village. It takes them a long time to pack and unpack, to set and take down their lodges. This is, however, of but little consequence to them; for wherever they are, it is their home.

They are very kind, and manifest their kindness in anticipating all, and more than all, my wants, which they have the power to supply. They consult me upon all their important business, and are very ready to follow my counsels. They are attentive to furnish little comforts. If the sun shines with much warmth into my tent, they will cut green bushes, and set them up for shade. A few days since, we encamped where there were some very fragrant plants of a species of mint, and the wife of Tai-quin-wa-tish with a few other women collected a considerable quantity, and strewed them in my tent.

Passed to-day mountains of volcanic rocks and over a more rich, black soil, where we found a good supply of grass for our horses at night.

Pursued our journey, on the 8th, as usual. Felt some soreness in my breast, arising from a cold, which began yesterday. My health thus far on the journey has been very good.

The Indian mode of living is very precarious, and yet they are not very anxious about the future. When they have plenty, they are not sparing; and when they are in want, they do not complain. The Indians at this time were almost destitute of provisions, and we were approaching the Salmon river mountains, to pass over which occupies between twelve and fifteen days, and in which there are no buffaloes and scarcely any other game. I felt a prayerful concern for them, that God would send them a supply before we should get beyond the range of buffaloes, and was confident that we should experience the truth of God's word, that he provides for all their meat in due season; and as the cattle upon the thousand hills are his, so he would not withhold from these Indians a supply of their need.

Continued to pass basaltic mountains;

and also passed some very white marl clay, which the Indians use for cleansing their robes and other garments made of dressed skins.

Their mode of doing this is by making it into a paste, and rubbing it upon the garments, and when it becomes dry, they rub it off, which process leaves the garment soft, clean, and white. We encamped to-day where they had before made an encampment, a little below a steep bank. Near night I was alarmed by shouts of Indians and a general rush up the bank. I hastened up and saw great numbers running towards our camp. It proved to be a foot race, such as they frequently exercise themselves in, for the purpose of improving their agility.

THE CHASE.

September 9th, more unwell. To-day we unexpectedly saw before us a large band of buffaloes. All halted to make preparation for the chase. The young men and all the good hunters prepared themselves, selected the swiftest horses, examined the few guns they had, and also took a supply of arrows with their bows. Our condition was such, that it seemed that our lives almost depended upon the issue; and while they were preparing, I could not but lift up my heart in prayer to God, that he would in mercy give them judgment, skill, and success. They advanced towards the herd of buffaloes with great caution, lest they should frighten them before they should make a near approach; and also to reserve the power of their horses for the chase, when it should be necessary to bring it into full requisition. When the buffaloes took the alarm and fled, the rush was made, each Indian selecting for himself a cow with which he happened to come into the nearest contact. All were in swift motion scouring the valley—a cloud of dust began to arise—firing of guns and shooting of arrows followed in close succession—here and there buffaloes were soon seen prostrated; the women, who followed close in the rear, began the work of securing the valuable acquisition; and the men were away again in pursuit of the flying herd. Those in the chase, when within two rods, shoot and wheel, expecting the wounded animal to turn upon them. The horses appeared to understand the way to avoid danger. As soon as the wounded

animal flies again, the chase is renewed, and such is the alternate wheeling and chasing, until the buffalo sinks beneath its wounds. The Indians obtained between fifty and sixty, which was a signal mercy.

It was interesting to see how expertly they use the bow and arrow, and how well the women followed up the chase, and performed their part in dressing those buffaloes which were slain. After travelling six hours to-day, we encamped in a good place on the eastern branch of the Salmon river, where it is of considerable magnitude. The pain in my breast changed and settled in my head, on the right side.

On the 10th, my health was no better, and I was obliged to resort to medicine. I could say with the Psalmist, "I laid me down and slept; for thou art with me." We did not remove to-day, for it was necessary for the Indians to dry their meat by what is called "jerking." The process is to cut the meat into pieces an inch thick, and to spread it out upon a fixture made with stakes, upon which are laid poles, and upon these cross sticks: moderate fire is then placed beneath, which partly smokes, cooks, and dries the meat, until it is so well freed from moisture that it can be packed, and will keep without injury, almost any length of time. Here we made preparation for the remainder of my journey to Walla Walla, which will probably occupy about twenty days.—*Parker.*

CENSORIOUSNESS AND CHARITY.

The stage coach and its four fine prancing horses had just started from the door of the Red Lion, well filled with passengers, and the deep voice of the dustman might be heard mingling with the persevering calls of an indefatigable little sweep boy, as an elderly lady, well known by the name of Mrs. Markwell, might be seen crossing over the principal street, in the pretty little town of Mayfield. It was evident (at least it was to so scrutinizing an observer as myself) that the old lady was in possession of more extraordinary news than usual; for she walked hastily along with a bustling and consequential step, whilst an air of particular anxiety and importance appeared on her countenance. At length after sundry turnings and wind-

ings, that might have puzzled a less experienced traveller, Mrs. Markwell paused at the door of a small, neat looking house, the window of which, by certain signs, such as those of a smart blond cap, a very gay satin bonnet, and a small card, on which was engraved the important name of Miss Frip, announced the inhabitant of the above-mentioned dwelling to be no other than the principal milliner and dress-maker in Mayfield.

Mrs. Markwell's gentle knock at the door was immediately answered by the words, "Come in," being uttered in a somewhat shrill voice; which free and unceremonious invitation was quickly accepted; but as soon as the dressmaker perceived the slender figure of Mrs. Markwell entering the apartment, she hastily arose, and poured forth a torrent of apologies and excuses for her rudeness and incivility. Mrs. Markwell, with one of her most gracious smiles, begged that she would not mention so trifling a matter; she added that she was merely passing, but she thought she might just as well step in in a friendly way, and see how things were going on. The usual congratulations and compliments having passed, and a few common-place remarks respecting the weather having been made, Mrs. Markwell untied the strings of her black satin bonnet, and drawing her chair closer to the table, kindly began to impart to her friend some of her newly acquired information.

"Do you know, Miss Frip," said she, in a low confidential tone of voice, "that Mr. Barker the chemist and druggist, who lately removed to that handsome new shop, near the corner of High-street, is completely ruined? I heard the news from the very best authority, or I should scarcely have believed that it was true. I never was more surprised in my life than when I was told so; for they seemed to be in such a respectable, thriving way, and Mr. Barker always appeared so particularly obliging to his customers."

"Perhaps he might," replied Miss Frip rather doubtfully; "but then he is reported to be exceedingly fond of company: and you know, as well as I do, Ma'am, that large and well-conducted parties must necessarily involve a tradesman in great expense. To speak the truth, I must say, that I have feared, for some time past, that they would not long be able to maintain their ground; for

Mrs. Barker, poor thing, is so extravagant and thoughtless, that she is quite unfit to take the management of a large family like theirs. The servants, I have no doubt, have pretty much their own way; for Mrs. Barker looks too indolent and inactive to interfere, and superintend her domestic concerns as she ought to do; and when that is the case, there must inevitably be great waste and disorder, so that even if they had ten thousand a year, it would soon be squandered away. And then with regard to the young folks, there has been a great deal of unnecessary fuss and expense with their education; they were all sent to the most fashionable boarding-schools which could be selected, where their heads were most probably filled with all sorts of nonsense and pride; indeed, the whole family are so exceedingly high, that they will scarcely condescend to notice a person who is a degree lower than themselves. I am sure I am very sorry for them; for I do not know, poor things, how they will manage; but then, when circumstances such as these do occur, one cannot help thinking, that people might have been more saving and careful, and not, as it were, have brought it all upon themselves."

"To be sure," echoed Mrs. Markwell, "who had listened very patiently to her friend's remarks, "it is very painful in scenes of adversity, to be obliged to look back, and see that it was owing to our own misconduct; but then, you know, Miss Frip, we are not certain that this is the case with the Barkers."

"I am sure, for my part, I have not many doubts upon the subject," replied Miss Frip, in a decisive tone; for although I am not intimate with the family, yet the little that I have seen and heard, is not at all in their favour."

Mrs. Markwell began to grow weary of the subject, so she quietly remarked, "Pray, Miss Frip, how did you like the strange clergyman last Sunday morning? I believe I saw you at church."

"Indeed, Mrs. Markwell, I must confess that I was sadly disappointed; for my expectations had been very greatly raised by the reports which I had previously heard concerning him."

"Then, I suppose, you did not approve of his sentiments," interposed Mrs. Markwell.

"Oh no, Mrs. Markwell, I do not mean that; they were very good, I dare say: though, at the same time, I thought

that most of his remarks were very common place. Indeed I knew quite as much before I went. But I should not have mentioned that as a matter of complaint, because one could not expect any thing new or striking from so young a man; but, then, his manner was so exceedingly disagreeable. He seemed to look about with such a proud and consequential air, as though all the wisdom of pious and eminent men was concentrated in him, till, really, poor young man, I was quite pained with his self-complacent behaviour. I am sorry to draw such conclusions, but I could not help fearing that *self* engrossed the greater part of his attention. How many there are, Mrs. Markwell, who think themselves to be *something*, when as yet they are nothing."

"Very true," remarked her complacent friend: "humility is, indeed, a difficult virtue to acquire; but, speaking of the church, reminds me of the marriage which took place there last week between young Mr. Wilton at the Barn, and the eldest of Mr. Grahame's daughters. Do you consider it a good match?"

Miss Fripp shook her head. "Why, perhaps, I am scarcely a competent judge," said she, "for I know but little of either party; but I should not be inclined to think that Miss Grahame is a very fit wife for a farmer; for I have heard that she knows French and music, and all those sorts of things, which I am sure will not be very consistent with the station in life which she is called to occupy, and will most likely unfit her for more important and necessary employments. And, indeed, Mrs. Markwell, I think that she is inclined to be very smart and extravagant; why, it was only a few weeks ago that I saw her pass by my window with such a beautiful silk dress on, trimmed with handsome black lace, which, I am sure, must have cost a pretty penny. And, as to her bonnets, I really don't know how many she has had this summer; so that, altogether, I fear that Mr. Wilton will find himself mistaken. By-the-by, the Wiltons, I find, are very intimate with my neighbour Mrs. Ashton, who has just taken that newly-painted house over the way."

"Ah," replied Mrs. Markwell, as she hastily glanced to the other side of the street, "I believe Mrs. Ashton is a very pious and benevolent individual. I hope

she will prove a great blessing to this part of the town."

"I am sure, I trust she may," answered Miss Fripp, rather coldly: "but I am sorry to say, that I am not quite so sanguine as you appear to be, for I have remarked several little things which have led me to draw conclusions of a very different nature."

"But, indeed, Miss Fripp," interposed Mrs. Markwell, "I know that she is in the habit of giving a great deal of soup and broth away to poor people, and this you must acknowledge is, at least, one good trait in her character."

"Why, certainly," replied Miss Fripp, moving her fingers with unusual velocity, "it is very convenient to be charitable at little or no expense; and you know in her house there are many pieces of meat, and lots of vegetables which would otherwise be wasted; but, really, I was told by a person who has been in the habit of receiving some weekly, that it was so much diluted with water, that it was scarcely worth receiving. I am sure that Mrs. Ashton is not by any means what I should consider a liberal woman; for, if a case of distress is mentioned to her, unless it happens exactly to accord with her own desires and inclinations, her frequent reply is, 'That she will consider about it;' or, 'That she will make some inquiries respecting it;' and I have found that these and similar terms are generally used by those who are anxious to avoid giving a direct refusal. There is nothing that I dislike, Mrs. Markwell," continued this talkative and critical lady, "more than endeavouring to *appear* benevolent. Now, would you believe it, Mrs. Ashton stints and deprives her family of many necessary comforts, in order that she may pretend to relieve the pressing wants of the needy around her. The poor servants do not have very abundant fare, and what they do have is of the very cheapest kind; for Mrs. Ashton is so stingy and near; and yet, after all, she is called charitable and benevolent. I really have not any patience with such people."

Mrs. Markwell made some unimportant reply; and the conversation next turned upon Mr. Clement's new servant, who, Miss Fripp thought, was no better than she ought to be (a rather singular phrase;) upon some gay neighbours who had been seen at the house of God, for the first time on the preceding Sabbath, but for no better reason Miss Fripp sus-

pected, than to display their fine figures and handsome clothes; upon one of her customers, who persisted in having her dresses made after the most juvenile fashion, although this discriminating lady was strongly inclined to believe, that she wore false auburn curls; that the white shining rows of teeth, which ornamented her mouth, were artificial; and — but, indeed, I think that I have already enumerated topics enough; and if the reader is as heartily tired of the conversation as I am, there will be no objection to hear that Mrs. Markwell has taken her departure from the dwelling of her loquacious friend, and is now comfortably seated in a neat little parlour belonging to a mild, pleasant looking lady, whom I beg to introduce as Mrs. Granville.

“Well, really, Mrs. Granville, what a sweet, snug little dwelling you have!” observed Mrs. Markwell, as she sipped the glass of wine which she held in her hand, and then looked round with admiration on the tastefully arranged furniture of the pleasant room in which she was sitting; “you seem to have retreated from the smoke and bustle of the town into a little paradise, where it seems as if cares could never possibly intrude.”

A smile illuminated the pale features of Mrs. Granville for a moment, and she replied, (as her countenance assumed its usual placid expression,) “You are aware that happiness does not consist in outward circumstances, Mrs. Markwell; yet I desire to return my sincere thanks to God who has kindly provided me with such a peaceful habitation in the last days of my pilgrimage.”

Mrs. Markwell sighed, and almost involuntarily glanced at a beautiful portrait which hung over the mantel-shelf, and which represented the last blooming and lovely daughter of Mrs. Granville, who had been suddenly snatched from the fond embrace of a deeply affectionate parent; but, anxious to dismiss so painful a subject from her mind, she said, “Perhaps, as you live in so retired a situation, Mrs. Granville, you may not have heard that poor Mr. Barker is in a state of the greatest distress, being unable any longer to maintain his business in a respectable and creditable manner; and all is owing, it is said, to their extravagance and mismanagement.”

“Oh dear, Mrs. Markwell,” answered Mrs. Granville, “I should be sorry to credit such an aspersion, unless it could really be proved; for they seem such

nice pleasant people; and Mrs. Barker is such a friendly, intelligent companion: so that I should rather conclude that it is some sudden and unforeseen stroke of Providence which has reduced them to their present circumstances. But perhaps, after all, it may prove to be a report, without any foundation.”

Mrs. Markwell, like most tale-bearers, assured her friend that she might safely believe that the preceding statements were true, since she had them from the most unquestionable authority: and then, desirous to adduce some reasons, which led her to conjecture the secret of their failure, she added, “Mrs. Barker is reported to have been very thoughtless and indolent, and it wants a person of experience and discretion to manage a family like theirs.”

“I am aware,” replied Mrs. Granville thoughtfully, “that Mrs. Barker was brought up in a very expensive and fashionable manner, and until her marriage, had not much to do with domestic concerns; but I have frequently been pleasantly disappointed to hear from various quarters, how useful she has become, and how careful she has been to incur no unnecessary expense.”

“But was it not wrong of them to send their children to such high and genteel boarding-schools?” persisted Mrs. Markwell.

“Why, I certainly am no advocate for placing young people in a situation where they will imbibe notions unsuited to their station in life,” replied Mrs. Granville; “but these schools might probably have been respectable, without being at the same time unsuitable; and as I am not intimately acquainted with the family, there might have been various reasons, unknown to us, but which, if explained, would fully justify their proceedings. Poor dear children!” continued Mrs. Granville, her eyes filling with tears, “they are just at an age to be sensible of the loss which they have sustained. I have noticed them, sometimes, with their smiling happy countenances, beaming with kindness and good humour, as they have passed by my window; and I have always admired their modest and retiring behaviour, so perfectly free from any appearance of pride.” Mrs. Granville paused, but finding that Mrs. Markwell was not inclined to make any answer, she added, “Perhaps you may have heard the anecdote of a liberal and sensible Quaker, who, when his friends

were relating to him a case of the greatest distress, and expressing their sincere sympathy with the unfortunate sufferer, one professing to feel for his wife, another for his children, hastily exclaimed, 'And I feel a thousand pounds for him; what dost thou feel, friend?'

"It is true," continued Mrs. Granville, smiling, "that I have not a thousand pounds to contribute towards relieving the necessities of others; but then, I am in possession of health and time, and if the Barkers are in trouble, an old woman, like myself, who has been used to affliction, may be able to render them some assistance. I will step in by-and-by and see."

"Pray," said Mrs. Markwell, anxious to gratify her love of curiosity, "what did you think of the sermon which was preached last Sabbath-day by the clergyman who supplied the place of Mr. R.?"

"Oh, Mrs. Markwell, I was so much pleased, that I scarcely know how to express my feelings in language sufficiently strong: he was so energetic and devoted, and yet so exceedingly plain and simple, that I am sure the poorest and most ignorant person in the congregation could not help understanding what was said. I assure you, I was much delighted, and, I hope, likewise profited, with the plain yet striking statements which were then delivered. There was not the least attempt to exhibit learning or talent; but the sole desire of the preacher seemed to be beautifully expressed in the words of St. Paul; 'I determined not to know any thing among you, save Jesus Christ and him crucified.'"

"But, did you not think that his manner was rather dull and unpleasant?" said Mrs. Markwell.

"My dear madam," remarked Mrs. Granville, seriously, "I was so deeply interested in the subject, that I quite forgot all other considerations for a time; and I do think, that when we go to worship God in his sanctuary, we should remember that we are listening to a message from Jesus Christ, and then we shall not feel disposed to criticise the preacher, although the manner of his delivery may not exactly accord with our fastidious tastes."

"I believe I saw you present at Mr. Wilton's marriage last week," said Mrs. Markwell, (who, although not offended with the previous remarks, was yet anxious to proceed with a more interesting topic:) "are you intimate with the family?"

"By no means," answered Mrs. Granville: "they are almost strangers to me; but I happened to be passing by the church, with a friend of mine, at the time, and she pressed me so earnestly to go in, that at last I rather reluctantly consented."

"Do you think the match is what we usually call a good one?" inquired Mrs. Markwell.

"I really cannot say," answered Mrs. Granville, smiling, "but Miss Grahame seemed a nice amiable young lady; and brought up as she has been by a very excellent mother, who is almost celebrated for her piety, prudence, and good management, I should think she will prove a suitable wife for Mr. Wilton."

A short pause ensued, until Mrs. Markwell, who seemed anxious to hear every opinion of her friend, without offering any of her own, mentioned the news which she had heard concerning Mrs. Ashton, requesting to know whether Mrs. Granville could give her any information on the subject.

"Indeed," replied Mrs. Granville, in rather an indignant tone, "I do not think that your story has the slightest foundation; and I am puzzled to know what pleasure a person can take in circulating such unfavourable reports. I am aware that Mrs. Ashton's income is rather limited, and that she is therefore obliged to incur no unnecessary expense; and perhaps she is rather more saving than we should deem proper; but then, those who are not fully acquainted with her circumstances, should not hastily draw such uncharitable conclusions as you have heard stated. As I know but little about Mrs. Ashton myself, I cannot attempt either to justify or censure her conduct; yet I may say, that I have lately met with two or three cases of distress which Mrs. Ashton has generously relieved, without the persons having any idea of who was their benefactress, until the discovery was quite accidentally made." Mrs. Markwell replied, "that she was happy to hear that she had been mistaken; and then discovering by her watch that her dinner hour was rapidly approaching, she was compelled to shorten her visit, and bid adieu to her friend, although her store of information was far from being exhausted.

As the old lady proceeded on her way home, walking along with the same brisk consequential step, which I mentioned at the commencement of my

story, she could not help remarking the different opinions and sentiments expressed by her two friends upon the same subjects; and possibly, had not the door of her own dwelling suddenly put an end to all meditation, she might have made some very interesting reflections upon this topic. Since, however, I hope that the attention of my readers is fixed for a few minutes longer, I would most seriously exhort them to seek diligently after charity, which marked every feeling and action of Mrs. Granville.

"Charity thinketh no evil," is part of the beautiful description given of that grace by the inspired apostle, and while many are boasting of its possession, let me ask you to try your pretensions by this test. Will they stand the trial? If conscience answers in the negative, deceive not yourselves with the vain hope that true charity dwells in your breast, and regulates your actions; but if you are able to reply in the affirmative, cherish the spirit that likens you to the blessed Redeemer. When you hear of the failings and errors of others, it will prevent a hasty belief of such reports, and an unjust judgment of those to whom they refer. Even when perfectly satisfied of the truth of what you thus hear, you will remember that circumstances of which you have no conception, may materially alter the case, and extenuate, though they do not justify the conduct which has been reprobated. A view of the depths of sin in our own hearts, will tend to preserve us from censoriousness of spirit.

Yet, whilst I would deprecate those feelings and principles which would lead an individual to exclaim, with a lofty brow and an imperious tone, "Stand by, for I am holier than thou;" whilst I would strenuously urge you to become deeply acquainted with that charity which thinketh no evil; yet at the same time, I wish to caution you against imbibing a spirit of *false* charity, which frequently appears under a very specious and alluring garb. Persons under the influence of this feeling, often endeavour to justify the sinful proceedings of their fellow-men, or at least to look upon them with complacency, if not with approbation, imagining that such trifling errors in doctrine, or such slight deviations from morality, are of so little importance that they will pass unnoticed by a God of mercy and love. Oh, let me earnestly entreat you to avoid this falsely-so-called

charity. Flee from such a system of error as you would from the approach of a venomous serpent, whose deadly fangs, if once forced into your frame, would soon destroy life; remembering, that though fools may make a mock at sin, yet God has pronounced a fearful malediction upon those who continue not in *all* things written in the book of the law to do them. Imitate, then, the example of the adorable Saviour, who held sin in such just abhorrence, that he pronounced eternal woe upon those cities which repented not; yet when love prompted him, he offered up himself as a sacrifice for sinners: imitate *his* example, who loudly and faithfully reprobated the sins of the scribes and pharisees, yet who, on coming to Jerusalem, beheld the city and *wept* over it.

BERTHA.

MOLLUSCA.—No. II.

Powers of Locomotion.

MANY bivalve mollusca, or those having two shells, are provided with an instrument shaped like a leg and foot, which they employ for progressive motion. It is composed of a mass of muscular fibres, interwoven together in a very complex manner, and which may be compared to the muscular structure of the human tongue. In both, the effect is the same—the conferring a power of motion in all possible ways, so that this member may be readily protruded, retracted, or inflected at every point. In some bivalves, the dilatation of the foot is effected by a curious hydraulic mechanism: the interior of the organ being formed of a spongy texture, capable of receiving a considerable quantity of water, which the animal has the power of injecting into it, and of thus increasing its dimensions. The solen, or razor-shell, has a foot of a cylindrical shape, tapering at the end, and in form much more like a tongue than a foot.

This valuable instrument seems, however, to assume different appearances. Thus, when the solen is preparing to form a dwelling in the sand, it takes the form of a shovel, sharp at one end, and ending in a point, by the aid of which, a hole is dug: it then alternately assumes the shape of a hook, and of the spade already mentioned; one assisting the animal in his descent, the other shovelling out the sand. When he wishes to change his abode, the leg is again employed; and it then takes the shape of a ball. This ball prevents the creature

from slipping back, while the reaction of the muscles throws him forwards. He has also a mantle in front, a curtain before the opening of his cell, which enables him to exclude the rough beating of the tide, and two united breathing-tubes, about three or four inches long, from the upper end of the shell; and these he projects through the soft sand, for the purpose of a communication with the water.

Suppose these appendages were wanting, then the solen would be among the most helpless of creatures; for he cannot moor himself to a rock, nor run on his feet, nor raise himself from off the ground. But here a full compensation is made him, and in each of these provisions the Creator has deviated from the ordinary construction of such creatures, and that with an obvious reference to the peculiar habits of this animal.

The foot of the common muscle, *Mytilus edulis*, can be advanced to the distance of two inches from the shell, and applied to any fixed point within that range. By attaching the point to any such body, and retracting the foot, this creature drags its shell towards it; and, by repeating the operation successively on other points of the fixed object, it continues slowly to advance.

This organ is of great use to such shell fish as conceal themselves in the mud or sand, which its structure is admirably adapted for scooping out. The cardium continually employs its foot for this purpose. It first lengthens and directs its point downwards, and insinuates it deep in the sand; it next turns up the end and forms it into a hook, by which, from the resistance of the sand, it is fixed in its position, and then the muscles which usually retract it are thrown into action, and the whole shell is alternately raised and depressed, moving on the foot as on a fulcrum. Thus the shell is dragged onwards; the animal is moderately active, and these movements are made two or three times in a minute.

The apparent progress is at first small; the shell, which was raised on its edge at the middle of the stroke, falling back on its side, at the end of it; but when the shell is buried so far as to be supported on its edge, it advances more rapidly, sinking visibly at every stroke, till nothing but the extremity of the tube can be perceived above the sand. The instinct which thus secures a shelter for the animal is said to operate at the

earliest period of its existence. It has been observed that one creature, *Mya truncata*, when fully grown, will not attempt to burrow; but on placing two young ones, which were scarcely more than a line—the tenth of an inch in length—on sand, in a glass of sea-water, they buried themselves immediately.

Another process is also remarkable. By doubling up the foot and pushing with it downwards against the sand below, the shell may be again made to rise by the same kind of efforts which before protruded the foot. Thus the animal is enabled quickly to retreat when danger presses; and when this is past, it can, with equal ease, come forth from its refuge.

The common cockle, *Cardium edule* it is said, can, by means of its foot, not only turn round, or to either side, but even take a good leap. A species nearly related to the cockle, and found on the coast of New Holland, has power sufficient to leap over the gunwale of a boat, to the height of above four inches. The foot of this animal is bent at an acute angle, so as, on pressure, to form a very elastic organ, and that of the cockle is nearly the same.

The pectens, or comb-shells, have long been celebrated for their motions. D'Argenville says, that when they are on shore, they regain the water by opening the valves of their shells as wide as they can, and then shutting them briskly, by which they acquire sufficient elasticity to rise three or four inches, and thus proceed till they accomplish their object. The foot most probably assists in producing these leaps. Their progression in the water is said to be very different; when they rise to the surface—in a manner which has not yet been clearly explained—they support themselves half under water. They next open their shells, to which they communicate such a vibration, that they acquire a very brisk movement from right to left, which enables them, as it were, to run on the water.

The tulip-shell, when it walks, if its progress may be thus described, opens and shuts its valves, and at the same time lengthens and shortens its foot, which movements seem to indicate a connexion between the former and the latter organs. Thus to these various but humble creatures, the Creator has granted powers of locomotion and means of enjoyment.



Cabbage Palm Seed,
and young plant from it.

Cabbage Palm. Full grown Tree.

Acorn of Oak,
with a young plant from it.

SEEDS.

THE various forms of vegetable life producing seed, were called into existence by the Almighty fiat on the third day of the creation.

"And God said, Let the earth bring forth grass, the herb yielding seed, and the fruit-tree yielding fruit after his kind, whose seed is in itself, upon the earth: and it was so. And the earth brought forth grass, and herb yielding seed after his kind, and the tree yielding fruit, whose seed was in itself, after his kind: and God saw that it was good," Gen. i. 11, 12.

Looking at the different forms and dimensions of seeds, the extraordinary manifestation of Divine wisdom and skill in their structure is exceedingly striking and interesting. Take, for example, a seed of the sweet-pea, *Lathyrus odoratus*, which is about the size of swan-shot, and not much larger than the head of a small pin, yet within these narrow dimensions are compactly folded up a large, branchy, flowering plant, which

may attain the height of seven or eight feet, and exhibit hundreds of fragrant blossoms during several of the summer months.

Previous to observation and experience, it would have been impossible to foresee that so large and fine a plant could have been evolved from a small blackish globe with a white speck in the side of it, filled with a yellowish white farinaceous matter, without a single indication of the luxuriantly green leaves, and the gay coloured and fragrant flowers, which decorate the full-grown plant of the sweet pea.

The seed of the laburnum tree, or goldenchain, *Spartium Laburnum*, is almost of the same form and size; yet the plant evolved therefrom may grow to one hundred times the size of the sweet pea, with so great a profusion of golden blossoms, that the leaves can scarcely be seen. Some laburnum trees will grow to the height of twenty or thirty feet, with a girth of half a yard or more, all originally springing from a small pea,

which encloses the germ of this fine flowering plant, so general a favourite in shrubberies and ornamental grounds.

The Spanish broom again, *Spartium junceum*, belonging to the same genus, has a seed not half the size of the preceding, and yet the shrub, also very showy and ornamental, is much larger than the sweet pea, though not equal to the laburnum. The seed, indeed, is about the same size as that of the pea-
everlasting, *Lathyrus luteus*, and that of the tufted vetch, *Vicia Cracca*, but the two last are very weak and flexible, depending for support on the bushes among which they grow; while the Spanish broom is stiff and upright, and needs no foreign support.

The bird's-foot trefoil, or yellow clover, *Medicago lupulina*, again, with seeds not very dissimilar in size and form, is a low-growing flower, only a few inches high, on commons and heaths, and seldom exceeding a foot, even when growing in a rich and well-sheltered spot.

These examples will show, that it is utterly impossible, by inspection or analysis, to predict anything respecting the size or beauty of plants from their seeds; for small seeds often produce large plants and trees, as has just been instanced in the laburnum, while large seeds will often produce plants comparatively small. The seed of the Tangier pea, *Lathyrus Tin-gitanus*, are about double the size of those of the sweet pea, yet the plants never rise so high by a foot or two, and do not branch so luxuriantly; and those of the yellow lupin, *Lupinus odoratus*, are similar in size and form, yet how different is the appearance of the plants which they severally produce.

Contrasts and differences equally striking, may be observed in other instances in the botanical world. Take the examples of the scarlet runner bean, *Phaseolus multiflorus*, the long pod garden bean, *Vicia fala*, Var., and the oak, *Quercus Robur*. The size of the seeds of those three species is very similar, making allowance for some little variety of shape; but how strikingly different are the plants themselves! The short, stiff, long pod beans are still less different from the light, and elegantly climbing scarlet runners, than both are different from the magnificent oak, which spreads its giant and robust arms over the greater part of an acre of

ground, and braves the storms of centuries, while they perish where they have their birth, within one brief summer.

The cocoa nut is one of the largest seeds, yet the tree is not very dissimilar in height and appearance to that of the cabbage palm, *Enterpe oleracea*, the seed of which is smaller than a common hazel nut, or a small cherry. This palm, like other palm trees, is without branches, and will grow to the height of sixty feet or more, with a naked stem, and a bushy head of leaves; in the centre of which grows the cabbage, containing the seed.

Our Saviour, who had all knowledge of things in heaven and things on earth; and always selected striking facts for the parables which he put forth "for reproof, for correction, and for instruction in righteousness," deemed this doctrine of seeds worthy of forming a parable. Thus he said, on one occasion, "Unto what is the kingdom of God like? and whereunto shall I resemble it? It is like a grain of mustard seed, which a man took, and cast into his garden; and it grew, and waxed a great tree; and the fowls of the air lodged in the branches of it," Luke xiii. 18, 19.

Botanists are not agreed as to what plant is meant by the word translated "mustard." Our common mustard, *Sinapis nigra*, it cannot be, as the description does not agree in any particular; this mustard seed being both comparatively large, and the herb itself small. Those who contend for it being the *Phytolacca decandra*, ought to show that this is common in the Holy Land, which is not, as the writer believes, the fact, any more than that the corn which the disciples plucked on the sabbath day, was maize, or Indian corn, rather than wheat; inasmuch as both the phytolacca and the maize are American plants, unknown, it is probable, in the Old World previous to the voyage of Columbus. But be this as it may, the beautiful illustration of the parable of the mustard seed, is not in the least affected; and the examples already given in this paper may serve, in some measure, to elucidate it. See page 44 of Weekly Visitor for 1833, for a sketch of branch of mustard tree.

Let us now turn from "the herb yielding seed," to the "fruit-tree yielding fruit after his kind;" and we shall meet with facts equally singular and interesting.

The seeds of the common apple, *Pyrus Malus*, or of the pear, *Pyrus communis*, before they are quite ripe are whitish, and not very different in size and appearance from a seed of oats stripped of its chaff and husks; nor is this very different from the seed of the rose, or of the sweet-briar, *Rosa rubiginosa*. But let the reader remark the extraordinary dissimilarity of the plants which these somewhat similar seeds yield: the apple or the pear tree, and the delicious fruit thence produced, to say nothing of the pretty blossoms in spring no less fragrant than the ripe fruit in autumn, and the plain and humble oat with nothing that can well be termed a blossom, but the seeds being of much greater utility for the support of life than the finest fruits of the most sunny climes; and again the rose, the queen of flowers and the pride of all gardens; the sweet-briar, with its odoriferous leaves and its scarlet hips; all produced from seeds of nearly the same weight, while the forms, though slightly different, are far from being dissimilar.

The final cause of the general smallness of seeds, even the seeds of large trees, such as the oak, appears to be the greater ease with which they can be diffused and preserved. Were the seeds of the oak to be as large, when compared with those of the scarlet runner, or the long pod bean, as the oak tree is larger than the bean plants, it would present insuperable difficulties to the extensive diffusion of the species, not to speak of the process of self-sowing, as it is termed; that is, the scattering of the seeds from the tree upon the ground where they may vegetate and grow. For, in order to successful self-sowing, the seeds must be covered with earth, decayed leaves, or the like; whereas if the acorns were the size of a large cabbage, when they fell from the tree, it would rarely happen that they could be so covered except by art.

From the smallness of the size of seeds also, and the common, hard, or tough shell with which they are covered, they are less liable to accidental injuries and bruises, which might cause putridity, and lead to the destruction of the whole seed. In fruits, particularly garden fruits, whose size has been increased by art, destruction from putridity is very common; but this affects the fruit rather than the seed enclosed in the pulpy substance.

The concentration of the vital principle of vegetation within a small space, has also the effect of enabling seeds to resist the influence of agents which might otherwise prove destructive; such as extraordinary degrees of heat and cold. Recent experiments have proved, that some seeds may be subjected for a short time to the heat of boiling water, 212 deg. of Fahrenheit's thermometer, without injuring their vegetating properties; and it requires the most intense frost to destroy the greater number of seeds, while some sorts, it is probable, might resist the greatest cold that could be produced. On the other hand, the plants themselves which spring from those very seeds, would inevitably perish from far inferior degrees of either cold or heat. During the very severe winter before the last, several illustrations of these facts occurred in the writer's garden.

The common nasturtium, or Indian cress, *Tropæolum majus*, is well known as a half hardy annual, which the first frosts of autumn are sure to kill in the most sheltered situations: so are loves-lies-bleeding, *Amaranthus caudatus*, and the purple convolvulus, *Ipomœa purpurea*. Yet seeds of all these three rather tender plants lay in the ground during the whole winter, severe though it was, and vegetated and grew luxuriantly in spring. What was even more striking, two balsams, *Impatiens Balsamina*, a decidedly tender species, sprung up self-sown, in the border, the severe frost not having been able to kill the seeds.

In this respect, the seeds of plants bear a striking resemblance to the eggs of animals, which are capable of standing a very considerable degree of cold, without losing their vitality, or being rendered unhatchable. With respect to the larger sorts of eggs, such as those of the common fowl, of the goose, or of the swan, it has been ascertained that when they are alive, that is, capable of being hatched, it requires a great degree of cold to freeze and destroy them; but when these eggs are not alive, or in any other way incapable of being hatched, they are as easily frozen as starch or any thing without life, of similar consistency to their contents.

No degree of cold appears to have any effect on the eggs of insects, and hence we see them as numerous in the spring and summer succeeding a hard winter, as if no frost had occurred; but, like the plants already noticed, this will not apply

to the insects themselves, which would assuredly be destroyed by the frosts, which do not appear to injure their eggs. The lacquey-moth, *Lasiocampa neustria*, for example, having a thick, soft body, full of juices, would readily perish in a very moderate frost; but its eggs which are glued to an exposed twig of a rose tree, or of black thorn, in a spiral ring, will brave the most inclement season, and remain unhatched from the end of summer to the beginning of the succeeding summer, when the young caterpillars will make their appearance, and encamp in a body ready to devour every leaf within their reach.

Moisture is much more destructive, both to the seeds of plants and the eggs of insects, than either cold or heat. When seeds are exposed to too much moisture, they become gorged and swell, till they either burst their integuments, or, what is more common, undergo the putrefactive fermentation, and perish. A more moderate degree of moisture, provided also, that there is, at the same time, sufficient warmth, will cause them to vegetate; a circumstance that sometimes occurs to the corn crops during a wet harvest, and proves to be not a little injurious, as the corn which thus vegetates prematurely, can never be made into bread, and must be given to cattle. In the case of the eggs of insects, a certain degree of moisture is so indispensable to the hatching of some species, such as the eggs of the ear-wig, *Forficula*, that the mother insect watches them with the utmost care, as the writer has repeatedly ascertained, placing them in a due degree of moisture, and removing them with equal care, when the moisture amounts to wetness. The eggs of slugs and snails are so impatient of drought, that the readiest way to kill them, is to expose them to the sun, when they speedily shrivel up, and are destroyed.

It is surprising how very similar in appearance the seeds of some plants are to the eggs of insects. The seed, for example, of the common charlock, *Sinapis arvensis*, a very noxious weed in corn-fields, bears no little similarity (if memory serves the writer aright) to the eggs of the drinker-moth, *Gastrophaca pottatoria* and those who are not acquainted with botany and entomology might readily mistake the one for the other. These eggs are laid on grass, or in its vicinity, on which the young caterpillars feed; and it might be supposed

that instead of eggs, a charlock plant had shed its seeds there.

Reverting to the capability possessed by seeds of long preservation, one of the most remarkable facts connected with the subject, was brought to light by the French *savans*, who accompanied Buonaparte to Egypt. It would appear that the ancient Egyptians, from some superstitious notions that the dead would want provisions in another state of existence, inclosed in the mummy cases a quantity of corn, bread, and other necessaries. Upon examining this corn, which had been partly parched, it was found to consist of wheat and barley, similar to the sorts now known. But the most surprising circumstance was, that some of this corn, though not less than three thousand years old, upon being sown was found to vegetate as if it had been fresh gathered.

J. R.

OLD HUMPHREY ON PROVIDENTIAL PRESERVATIONS.

It is a profitable thing for a pilgrim to look forward to the city with the golden gates; for a sight of the shining portals of heaven animates him to bear with patience, and to overcome with perseverance, the trials he meets with on earth. Not that he can always do this; for oftentimes there is a cloud in the distance, and a mist around him that obscures his view: but when he can catch a glimpse of his heavenly inheritance, it gives strength to his fainting soul. Nor is it an unprofitable thing, while resting beside the King's highway, to give a backward glance at the crooked lanes, the thorny places, and the quagmires through which he has been led and mercifully sustained. Let us apply these observations to ourselves.

It may be that you are younger than I am, and have not borne so long the heat and burden of the day; or it may be, that your years outnumber mine; in either case, your memory will no doubt serve to remind you of many narrow escapes, or rather of many merciful preservations, from imminent danger.

Now it seems to me that we hardly think enough of these things; for, consider what can be a stronger pledge that God will protect us in future dangers, than the knowledge that he has preserved us in those which are past? I am not calling on you to enumerate your mercies,

for you may as well try to count the blades of grass, as attempt to do that; but you may recall to your mind such particular instances of God's almighty and merciful preservation, as may constrain you to say, "O Lord, open thou my lips; and my mouth shall show forth thy praise," Psalm li. 15.

In order that you may be persuaded to sum up your preservations, I will here relate to you a few of mine. By them you will see that if the heart beating in the bosom of Old Humphrey be not grateful, it must be harder than stone.

In the days of my childhood, a servant brought a pan of hot coals to warm the bed, wherein I had been put without her knowledge. You may guess what followed. My agonizing screams confused and confounded poor Betty, and the pan of coals was not removed till it had inflicted on me injuries that placed my life in danger. On what a spider's thread our existence seems to hang! What is our life? "It is even a vapour, that appeareth for a little time, and then vanisheth away," James iv. 14.

Not long after I had recovered my strength from my accident by the warming-pan, I fell through the cellar window of a half-finished house, by which misfortune, my forehead, striking against the sharp edge of the brick-work, was laid open. For some time I lay bleeding, and was taken up for dead. Gray hairs are now growing on my head, but the scar on my brow is visible still. Truly may we say to one another, whether we are old or young, "Boast not thyself of to-morrow; for thou knowest not what a day may bring forth," Prov. xxvii. 1.

When a school-boy, in attempting to get down a high rocky bank, my toe caught under the root of a tree, and I was pitched down headlong into the hollow way beneath. A sloping heap of sand at the bottom eased my fall, and most probably saved my neck from being broken. Surely dangers are ever around us, and "our days upon earth are a shadow," Job viii. 9.

Before I could swim, I was a good diver, and often amused myself with diving in deep water to a certain point, where I caught hold of the top of the granite stones, which formed the side of the basin. On one occasion, the water was so low, that when I arrived at the accustomed point, I could not reach the

granite stones. Again and again I struggled desperately to effect my purpose, but in vain, and was on the point of sinking, being much out of my depth, when a swimmer caught hold of me.

The result is the same, whether God of his goodness sends an angel from his heavenly throne to save us when in danger, or strengthens the arm of a fellow-mortal for the work of our deliverance. To Him, in either case, be the glory and the praise. "It is a good thing to give thanks unto the Lord, and to sing praises unto thy name, O most high," Psalm xcii. 1.

In going, on a certain occasion, into an upper room of a very old house, the crazy floor gave way under my feet. Had I not caught hold of the joist, most likely I should have found my way into the cellar, and this record of mishaps would never have been noted down by Old Humphrey. "Lord, make me to know mine end, and the measure of my days, what it is; that I may know how frail I am," Psalm xxxix. 4.

I once accompanied a friend of mine to examine the roof of a chapel, and, while the ringer of the bell was absent from the belfry, we clambered up past the bell to the roof. The place was narrow, so that the bell, which then stood with its clapper upwards, when swinging round occupied the whole space. My friend and I had crept through a trap-door to the roof, and were on the point of returning; already had I bent my body to creep through the trap-door, when a loud creak made me withdraw my head. The sound of the ponderous bell at that moment thrilled through my heart. The ringer had returned to the belfry, and had pulled off the bell, not knowing that any one was above. Had not that timely creak warned me of my danger, the massy bell must of necessity have dashed me in pieces. In such danger, my language might indeed have been, "There is but a step between me and death," 1 Sam. xx. 3.

At a period of my life, when I was somewhat more nimble than I am now, I foolishly ventured to cross a precipice on the side of a mountainous hill. The hill was six or eight hundred feet in height, and the precipice, perhaps, about two hundred. I had supposed the side of the precipice to be hard and firm; but no sooner had I got to the steepest

part, than the ground gave way beneath me. There was no hope but in dashing on, and this I did with all the headlong energy of despair, the earth crumbling beneath my foot every step I took. When I stood on the opposite side of the precipice in safety, I looked back with a degree of terror on the jeopardy that had well nigh destroyed me. "Walk circumspectly, not as fools, but as wise, redeeming the time," Eph. v. 15, 16.

During my first visit to London, a friend and I took a boat on the river Thames. Those who remember the fall of water through the centre arch of old London Bridge, when the tide was returning, well know, that to pass through it safely, in a small boat, without a very skilful boatman, was very dangerous.

My friend and I, both inexperienced in rowing, had taken up the oars to paddle about in the stream, giving the boatman a cheese-cake or two, with which to employ himself. Imperceptibly we got into the strong current, and in a few minutes should have been hurried through the centre arch, and perhaps into eternity, had not the boatman, dashing down his cheese-cakes, suddenly caught hold of the oars and rowed for his life. We shot through one of the side arches like an arrow from a bow, and escaped with our lives, not unmindful of our danger, nor unthankful for our preservation by Him "in whose hand is the soul of every living thing, and the breath of all mankind," Job xii. 10.

In France, I was once so beset with great peril, and driven to such extremity, that I took out my knife, holding it ready opened in my hand to defend myself from any sudden attack of my treacherous companion. I had reason to "offer unto God thanksgiving," and to pay my "vows unto the Most High," Psalm l. 14.

Never was I in greater danger than on the occasion of seeing a female friend home late at night. Not being able to make the servant hear by ringing the bell, and fearing lest an accident had taken place, I went round to the back of the house, and clambered over the garden wall. As I stood on it, the casement of a cottage near was gently opened: little did I then dream of my perilous situation. At that moment a loaded pistol was directed against my life. The

owner of the cottage hearing people talking, had got up to the window, and seeing, as he supposed, a robber scaling the wall, he stepped back, laid hold of his loaded pistol, cocked it, and placing his finger on the trigger, aimed it at me. At this instant he thought that he recognized his neighbour's voice speaking to me; and thus was I again mercifully preserved. "O give thanks unto the Lord, for he is good; because his mercy endureth for ever," Psalm cxviii. 1.

The last instance of imminent peril that I shall now record, is one of a singular kind. I had descended a copper mine, habited in the flannel jacket and slouched hat of a miner, and carrying a candle in my left hand. If I remember right, the mine was double the depth of an ordinary coal mine. I went down not less than forty or fifty ladders placed perpendicularly against the sides of the different shafts.

After reaching the bottom, visiting every part of the mine, and observing the different operations performed by the miners, I began to ascend the perpendicular ladders, bathed with perspiration occasioned by heat and fatigue.

I had ascended about midway, when grasping one of the rounds of the ladder on which I stood, it came out loose in my hand. It happened at the moment, that my left hand, which held the candle, had a sufficient hold of the ladder to prevent my fall, otherwise I must have been precipitated down the fearful abyss beneath me. Now, ought not Old Humphrey to be among the first and foremost of those whose hearts and tongues cry aloud, "Let every thing that hath breath praise the Lord," Psalm cl. 6.

Haply these instances of providential preservation will recall to your memory some of your own that you had forgotten, and prompt you to pay some fraction of the debt of gratitude you owe to your heavenly Father, for his parental care and continued loving-kindness; so that we may together "sing unto the Lord, and make a joyful noise to the rock of our salvation: let us come before his presence with thanksgiving, and make a joyful noise unto him with psalms," Psalm xvi. 1, 2.

"When all thy mercies, O my God,
My rising soul surveys,
Transported with the view I'm lost
In wonder, love, and praise."

SINS GOING BEFORE TO JUDGMENT.

MY YOUNG FRIEND,

It is not my design to speak of the future judgment. That there will be a righteous discrimination and also the awards of character in eternity, is one of the plainest doctrines of revelation, and one of the first and most essential principles of moral government. But it would occupy too much space to introduce that subject; and besides, it belongs more properly to theological works. I think, however, my reader will not deem it irrelevant, if I refer to the retributions of sin, as they sometimes begin to manifest themselves before the close of this life. There is a sentiment lurking in many minds whose moral discriminations are not quick and keen, that although there may be some inconvenience attending sin, after all we exaggerate its evils; that the way of transgressors is about as easy and pleasant as the way of the obedient, at least to those who choose it; and that for aught that appears, the righteous and the wicked may be presumed to fare nearly alike in the end.

It seems to have been for the admonition of such persons that the inspired writer said, "Some men's sins are open beforehand, going before to judgment; and some men they follow after," 1 Tim. v. 24. That is, sometimes sin begins to be overtaken with retributions in the present world, so far at least as to illustrate the fact that we are under a righteous moral government. Such instances seem to anticipate the retributions of eternity. Many are so sceptical in regard to what lies beyond the grave, that God sometimes brings the judgment, as it were, to this side of it. As he sometimes grants a portion of the very joys of heaven to the soul of a dying Christian, that he may thereby encourage the pious in the way of obedience, he also sometimes sends a portion of the very woes of perdition to the soul of the dying sinner, that he may thereby teach the wicked to turn from his evil ways and live.

As an illustration of this, I have concluded, after much hesitation, to mention the particulars of a case which fell under my own observation. I shall state the facts as they occurred, without any exaggeration or embellishment.

A young man left his father's house in

the country, at the age of fifteen. He had a pious mother, and had been the subject of early religious instructions and impressions. After he began to reside in the city, according to his parent's directions, he attended for a while upon the faithful preaching of the gospel, and was of hopeful habits. He, however, kept himself aloof from the more personal and special means of religion, yet still believing it to be important, and designing to attend to it at a future time. He formed an acquaintance with associates less favourable to piety, with whom his feelings gradually learned to sympathize. He went on in this way for four or five years without much obvious change; though he was, of course, resisting convictions, hardening his heart, grieving the Spirit of God, and laying the foundation of his moral ruin. He often received letters from his mother, reminding him of his duty, and urging him to it; over some of which he was constrained to drop a tear, and make good resolutions.

But the way of his heart was backward from God. Every month hardened him the more in impiety. He at length began to visit rather freely the theatre, and other dissipating amusements and pleasures. His place in the house of God was sometimes vacated, especially in the afternoon, and he was scarcely ever at the evening religious lectures. His mother's letters he read with less attention than formerly; for he had begun to suppose himself a young man of some consequence, quite competent to think and judge for himself, without her assistance: he thought, indeed, she was a kind and good mother, but that she did not know so much about the customs of the city, and what was most becoming a young man in his situation, as himself.

About this time, he fell in with some sceptical writings. He at first hesitated as to reading them; but as he had attended the infidel meetings once or twice without experiencing any harm, he thought there could be no danger in just seeing what its writers had to say, especially as it was his principle to examine all sides. He first read, then doubted, then began to be more wise than all his teachers; and at length slid quite over into the yawning gulf! His seat in the house of God, at first only occasionally deserted, was at length quite forsaken.

He was now quite prepared for more

desperate steps. He lost his situation from certain irregularities and vices; and all know how difficult it is for a young man to obtain a second place, when the first is forfeited by improper conduct. He at length succeeded in finding employment, but it was not such as he had lost. It was a much humbler and more menial condition, to which he found himself reduced. His ambition was broken down; he was mortified and discouraged. This subjected him still more to the power of the baser motives. To these he continued to yield more and more; losing of course what remained of self-respect, and falling under those severe lashes of self-reproach which, if they do not bring to repentance, drive to more desperate lengths in sin.

I will not detail the sad particulars respecting his subsequent course for four or five years. After several fruitless attempts to retrieve his circumstances, he changed his place of residence, hoping to do better. But his character and habits went with him. For five years he did not write a single letter to his parents, and according to his statement they did not know anything of him; although they were most of the time only about a hundred and fifty miles distant. But he had determined that neither they nor any of his former acquaintances should know where he was, or what he was doing.

He attempted to act upon the stage, but could not succeed. He even undertook to be a juggler, but soon found it quite out of his province. He began to gamble; but usually lost when he had anything to lose. How he obtained the means of subsistence during his years of profligacy, they can tell who are acquainted with that manner of life better than I can. He wandered from place to place, prodigal, reckless, forlorn, rapidly wasting his health, till at length he was reduced to the condition in which I first saw him.

One day an individual applied to me and said, "There is a young man at my house, whom I am desirous you should visit. We took him in some three or four weeks since, out of charity; for he is destitute, homeless, and sick; although he is a young man of respectable manners, and appears to have seen better days. But we cannot get much out of him. He is not inclined to talk. The physician thinks that he is in a fixed

and rapid consumption. He has a wasting cough, with night sweats, seems to be very much dejected, says but little, and is at times apparently in very great distress of mind. I asked him if he was willing to see a minister or some other Christian friend: he at first refused; but has since consented."

I, of course, took an early opportunity to visit him, and found his condition even worse than had been represented. It presented a wan, ghastly countenance, a sunken eye, a hollow voice, as from the tomb, an expression of intolerable anxiety upon his countenance, everything indicating extreme wretchedness and an opening grave. He was at first disinclined to converse; he seemed to be completely reserved, and no efforts could draw him forth. I addressed a few words to him, such as I thought best calculated to lead his thoughts to the Saviour, and with his permission offered a short prayer. On retiring, I asked him if he would like to have me call again. He assented.

Soon after, I renewed the visit. He was lying in bed, and had just recovered from a severe paroxysm of coughing. After a short time, he beckoned me to him, and with a low voice said he should like to see me alone for a few moments. The nurse and lady of the house, who were present, left the room. When we were alone, he fixed his eyes upon me in silence. There seemed to be a conflict in his mind, whether to speak or refrain. At length his struggling spirit burst its enclosure, and he began to tell something of his history.

He was now in his twenty-sixth year. For nearly five years he had been, as he supposed, a confirmed infidel. He had become an alien from his parents, they did not even know where he was, nor was he willing that they should. He felt that he had ruined himself. He saw clearly where the work of ruin commenced; it was in his resisting his early convictions of truth and duty. His father was not a godly man; but his mother was pious, and he had no doubt she had wept rivers of tears over him.

After a gust of emotion, which for a moment suspended his utterance, he proceeded:—It was not infidelity that ruined him; the procuring cause of his ruin lay farther back. He was virtually ruined before he became an avowed in-

fidel. It was his resisting the admonitions of God and the striving of his Spirit, that made him an infidel; but his infidelity had served to plunge him into more open and desperate iniquities. Since he had embraced infidelity, he had committed vices at which his earlier youth would have shuddered: fraud, gambling, drunkenness, seduction; he had led others into the same vices.

"But these," continued he, "are only the warts and excrescences of my ruined character; the ruin itself lies deep in the soul, and the misery with which it is overtaken here is only premonitory of the everlasting misery which awaits it beyond the grave. For several years, I have tried to disbelieve the Bible. I have succeeded. I have been a confirmed infidel. More than that—I have been an atheist. I used to hear it said that no man can be really an atheist; but I know to the contrary. I have been an atheist. I have perfectly and fatally succeeded in being given over to a strong delusion, to believe a lie that I might be damned, because I obeyed not the truth, but had pleasure in unrighteousness. But I am no longer an atheist. I am convinced that there is a God. I feel, I know, that I am an accountable being, and that a righteous judgment awaits me in eternity."

After a moment's rest, his countenance gathering more intensity of expression, he added, with increased energy, "But the most terrible thing to reflect on is, that I have not only ruined myself, but have been the cause of leading others to ruin. Oh, I am sure that the everlasting execration of ruined souls must follow me into eternity! Oh that I had never been born, or had sunk in death upon my mother's arms!"

I here endeavoured to cast oil upon the rising waves of emotion, and to calm his tempestuous spirit, by reminding him of the great mercy and forgiveness there is in God. "No," replied he, "not for me: I cannot be forgiven, and I cannot repent. My day of grace is all over. But I feel greatly relieved since I have told you my story. I am glad you came, sir. Wretched as I am, this is the best moment I have seen for a long time. I have hitherto kept all this to myself, it has been as a fire shut up in my breast. I have not known one hour of peace since I left the paths of virtue; and for two or three years I have been

perfectly wretched. I have often been upon the point of committing suicide."

After a few words intended to direct his mind to the source of hope, I left him, promising to see him again the next morning, if he should survive till then. He did survive—the morning came; but it was no morning to him. The sweet rays of the rising sun shot no kindling gleam of hope into his dark and troubled soul. I had hoped, I had almost expected, to find it otherwise.

I have somewhat doubted in regard to the expediency of relating his expressions the next morning, but as I have undertaken to report the facts as they were, I do not know that I should do right to withhold a part of them; especially as he not only permitted but requested me to admonish all others by his example, if peradventure he might serve as a beacon to warn them off from the vortex into which he had been drawn. He had no longer any wish to conceal anything; he seemed rather to wish to proclaim his wretchedness to the world. He was dead to hope, and alive to despair. With recollections of his past life, an awakened conscience, eternity full in view but a step before him, and every gleam of hope excluded,—oh, it was indeed a painful illustration of the inspired truth, that "some men's sins are open beforehand, going before to judgment."

The following conversation took place on the occasion now referred to:—

"How do you do, my friend, this morning?"

"As miserable as sin and wrath can make me!"

This he said with an emphasis, which surprised and startled me.

"And did you obtain no rest last night?"

"Not a moment's rest; my soul has been in perfect misery."

"But you are excited; your body is diseased, and your mind is weak and morbid. You ought to endeavour to compose yourself to rest, to become calm, and to look to that source of forgiveness and mercy which is still open to you, if you repent and believe."

"No, no; it is impossible, I cannot compose myself, I cannot be calm. My body is well enough, but my soul has been in hell all night! I have denied that there is a hell: I have scoffed at it; I have induced others to do the same,

and now God is convincing me of my error. Oh, I know now that there is a hell; I feel it in my own spirit. I am glad that you have come to see me, that I may tell you how miserable I am. This is the only relief I can get. You are the first person to whom I have ventured to make known my misery. I have for a long time kept it to myself; but I can no longer conceal it."

"It is well for you to acknowledge your sins. But you should confess them to God, as well as to your fellow-men. He has said, 'Acknowledge thy transgressions;' and, moreover, 'He that confesseth and forsaketh his sins, shall find mercy.'"

"No, no, I cannot approach God—I cannot meet him—I cannot! Oh, that the same grave which will soon bury my body, could bury my soul with it. Oh, that I might be annihilated! This is what I have long hoped for and expected; but this hope has failed me. I never before realized the meaning of that scripture, 'When a wicked man dieth, his expectations shall perish.' All my expectations have perished. I have been for some time reviewing my past life, and during the last night, that passage kept passing like a burning arrow through my spirit, 'Rejoice, O young man, in thy youth; and let thy heart cheer thee in the days of thy youth, and walk in the ways of thine heart, and in the sight of thine eyes; but know thou, that for all these things God will bring thee into judgment.' Yes, I have walked in the way of my heart, and in the sight of my eyes; and now God is bringing me into judgment. 'The arrows of the Almighty are within me, the poison whereof drinketh up my spirit.' You can pray for me; but it is of no use. You are very kind; the family here are very kind; I thank you all; but you cannot save me. My soul is damned!—the seal of reprobation is already upon me!"

These last were precisely his words; and they were uttered with a pathos, a sort of calm, fixed, significant earnestness, which almost overcame us. I can never forget his expression, when he fixed his dark, restless, glassy eyes upon us, and uttered these last words. Perceiving it in vain to say anything more to him while in that state, we withdrew, that he might, if possible, be composed to rest.

The next day I called again to see him,

and found him dying. His power of utterance had almost failed. I took hold of his hand, and told him it would afford us great relief, to know that he left the world reconciled to God, and trusting in the Saviour's grace. His only reply was,—and they were the last words I heard him utter;—"If the grave would bury my soul with my body, I should consider it my best friend; that would be immeasurably better for me than my present condition; or anything I have a right to expect." After again commending him in a short prayer to the mercy of God, I was obliged to leave him. In about an hour afterward, he died.

The next day I attended his funeral. It was the most gloomy occasion to which I was ever summoned. Not a relative was present. Here was a young man, evidently of fine natural talents, who might have been a comfort to his parents, an ornament to society, and a blessing to mankind; who might have pursued a useful and happy life, and been raised to shine as the brightness of the firmament for ever and ever—cut off from life and happiness and hope, when he had only reached his twenty-sixth year.

And what had done this dreadful work of desolation? It was sin. These are thy doings, these thy triumphs, O, thou enemy of God and man. Destruction and misery are thine. Thou hast converted a paradise into thorns and thistles; all that is most fair, lovely, and promising, it is thy delight to blast and destroy; that very earth which was pronounced "good," and which might have been peopled with the joys and praises of heaven, thou hast in all ages filled with weeping, lamentation, and woe. And yet will men call thee a pleasing trifle, invite thee to their bosoms, and love thee instead of God.

This young man died, and found his grave among strangers. No mother was present, to watch the last struggles and catch the last words of her dying son. He could not ask her forgiveness, nor know that she forgave him. No sister was there to wipe the cold sweat from his pale brow. His father had been dead some three or four years. The conduct of his son might have hastened his end. The residence of his mother was ascertained, and the facts respecting him communicated to her. She had for some time given him up for

lost, supposing that he had gone off to sea, and was probably dead. Again were a mother's tears and sorrows called forth afresh; but she too has since died, and gone, we trust, to that better world which sin has not invaded, where "the wicked cease from troubling, and where the weary are at rest." Some family connexions are however still living, on whose account no name and no further particulars will be given.

Excepting the two or three last sentences, I have not given the young man's conversation exactly in his own words, but as nearly so as I can recollect them; except that I have in some instances mitigated or withheld expressions which I deem unprofitable to repeat. I question the expediency of introducing into the minds of young people, even for the sake of administering to them a salutary warning, the more profane and blasphemous language of those that have grown ripe in sin. "O my soul, come not thou into their secret; unto their assembly, mine honour, be not thou united."

In reviewing the sad history of this youth, we ought to notice for our instruction the most important particulars which contributed to his ruin.

In the first place, it is probable that his parents were not so faithful to him as they should have been, while he was under their immediate care. He had a pious mother, but his father was not a pious man. It is not probable that he was early trained to bow in homage to God at a family altar; and all may know how difficult it is for a mother to secure the power of religious principles over the minds of her children, when not aided by a father's counsels and prayers; and how exposed it leaves a son, when he goes forth from home into the world, to ascribe whatever of religious instruction he received in his childhood to the well-meant zeal of a kind but mistaken mother. It needs the sanction of the father.

In the second place, they should not have sent him into the city to reside, without placing him under the immediate and vigilant watchfulness of some competent and trustworthy individual, and maintaining with him, as well as with their son, a constant correspondence, to know how he was doing.

They should also have secured his regular attendance at the house of God, and taken pains to have him personally

acquainted with his pastor. The moral power exerted over a young man, by a personal and friendly acquaintance with a minister of Christ, is very great. It is also important that a youth, coming as a stranger to reside in the city, should be introduced to one or two well-ordered families, where he may occasionally call, be received with cordiality, and treated in some measure as a son and a brother. Every individual needs some society. For want of this kind of sympathy and attention, a young man is in danger of losing his self-respect, and descending to base society and vicious indulgences.

All these conservative means are needed, and they have a moral power over youth likely to counteract opposing influences. They may be secured; and the parent is guilty of great want of consideration, for which he may expect to be punished in the ruin of his son, if he does not secure them.

In the third place, the moment those parents knew that their son was taking any incipient steps in vice, they should have recalled him from the city, and kept him under their own eye. From the day that a young man begins to shun the society of those to whom he was intrusted, to form bad acquaintances, to be fond of the theatre, to be occasionally absent from his place of worship, to indulge in drinking, and to be out at nights, it is certain that he is going wrong. Not an hour is to be lost. His danger is imminent. He should be instantly placed at the greatest possible distance from all those temptations which have begun to destroy him.

But the neglect of others can justify no individual in doing wrong. Let us then notice the sin of the young man himself; more particularly the leading steps in his progress to ruin. In the first place, he should have hearkened to the voice of God when a child. Committing himself to his care and guidance, and seeking his favour before all other things, he should have said to him, "My Father, thou art the guide of my youth." The lessons of his mother, and of his Sabbath school, had taught him to do this; and a voice of known authority had said to him, "Remember now thy Creator in the days of thy youth, while the evil days come not, nor the years draw nigh, when thou shalt say, I have no pleasure in them." It was in resistance of conscience and of known duty,

that he refused obedience to this command. Had he obeyed it, he would have had sure and unfailing protection through life; his feet would never have been thus left to slide.

In the second place, after he began to reside in the city, and was in attendance upon a faithful ministry, it was a favourable opportunity for him, before his acquaintances and habits were formed in his new situation, to yield up his heart to God, and to join himself to his people. He ought to have done it. When he found himself separated from the guardians of his youth, and in circumstances of untried temptation—when he felt the occasional loneliness and despondency which every young man feels, on being first actually exiled from his home and cast upon his own resources—then was one of the seasons of God's special visitations to him; then it was, with a great and threatening accumulation of guilt, that he turned from the counsel of his mother, of his pastor, and of other Christian friends, saying to them, "Go thy way for this time; when I have a convenient season, I will call for thee." You may observe that irreligious youths coming from the country into the city, usually become pious soon, if ever they do. If they resist religion for a considerable season in their new situation, and under the peculiar and urgent convictions which they then have, they become hardened and fall under the power of those peculiarly adverse influences which are seldom or ever surmounted.

In the third place, his becoming the prey of infidelity greatly facilitated his progress to ruin. Had he before been faithful to his obligations, his reading and hearing something of infidelity would probably not have injured him; though it is certainly not worth while for any man to punish himself with death, in order to ascertain the quality of poison. But this young man, according to his own confessions, had sinned, as all who become infidels do, against clear convictions of truth and duty, before he was given over to "strong delusions to believe a lie."

In the fourth place, losing his situation in business was another fatal step. From that time, his course downward was, as we have seen, very rapid. His ambition was broken, his spirit subdued, his pride mortified; he left off writing to his parents, gave himself up

to low vices with more fearless restraint than before; and at last became one of the most hopeless and dangerous of all characters—a gentleman vagabond.

I do not by any means consider the state of an individual's mind in the last hours of life, as a sure indication of his future condition. It is nearly and perhaps always, the lot of the truly good man to die either peacefully, or in the triumphs of Christian faith and joy; it is sometimes the lot of the wicked man, to die under the most burning stings of conscience, and with a "certain fearful looking for of judgment, and of fiery indignation." But not unfrequently does the hardened sinner die in a state of moral torpor. Superficial observers call it resignation and calmness; but it is utterly unlike true Christian serenity. It is to the soul that thus leaves the world, like that still and awful repose of nature which precedes an earthquake. It is more painful to see a sinner die with this blindness and deadness to the realities of judgment and eternal retribution, than in the awakened state above described. It is as one sleeping in a sinking ship or a consuming dwelling. The impenitent man dreams not but all is well, till he awakes in eternity, a sinner undone for ever.

You will not, I trust, impute these remarks to any other than a sincere and tender concern for your true welfare. It is not because I find pleasure in setting forth the awful retributions of sin, but because I wish to give you timely and effectual warning against them, that I feel constrained to speak of them: I hope they may never be yours to experience.

But I am rather to presume that you are not immoral, nor in the popular sense, sceptical. Yours is not the sin which breaks out into open vice and disgraces you in the eyes of men; but still do you not cherish and practise the sin which sets at nought the authority of God, breaks his law, neglects his mercy, grieves his Spirit, despises the sorrows of Jesus, and encourages others in irreligion? Are you not living without prayer, without repentance, without love to God, or the interests of his kingdom? And to crown your guilt, are you not trusting to your selfish and secular morality to justify and save you? "While such as persevere in vicious courses will surely perish," says a distinguished and sound writer, "it is equally certain that

as a basis of justification in the sight of God, a blameless moral life is altogether inadequate. It is a bed too short to stretch ourselves upon, a garment too narrow to cover us. Men often imagine in their blindness, that they are too good to become eternal associates for the reprobates in hell; but let the commandment come with power to the mind, and their thoughts, feelings, and pursuits be brought to the test of God's law, and they soon discover themselves to be great sinners. Often do men go on, flattering themselves in their own eyes, until eternity discloses their real character, and their souls are lost." "O wretched state, to one who had not dreamed of it, but had gone down into eternity under the delusion of the great destroyer—to bid an eternal farewell to the Bible, to the house of God, to the sacramental table, to the invitations of mercy, to mercy itself, to heaven, to angels, to saints, to God and to Christ, to love, to peace, to hope; to all enjoyment, corporeal, mental, and spiritual; to become a companion of devils and damned spirits, and a prey to endless remorse."

This may seem to you harsh language. But does it not exhibit the sentiments of the Bible? And when you behold such terrible manifestations of the fruits of sin "going before to judgment," even in its incipient forms and stages, how can you doubt that the greatest of all sins as estimated by God, that of rejecting the expensive provisions of his grace, and living in impenitence and unbelief under the tender and urgent calls of his redeeming mercy, will be less severely rebuked and punished in the world of righteous retribution, than such language imports? How often do we see men, even in this world, awakened to a most keen and agonizing conviction of these truths. Think you not that there is meaning in such Scriptures as these? "He that despised Moses' law died without mercy under two or three witnesses: of how much sorer punishment, suppose ye, shall he be thought worthy, who hath trodden under foot the Son of God, and hath counted the blood of the covenant, wherewith he was sanctified, an unholy thing, and hath done despite unto the Spirit of grace?" "How shall we escape, if we neglect so great salvation?"

No matter, then, how fair your external morality; if you have not taken the Divine law for your rule of life, and yielded yourself to the requirements of

the gospel, by that repentance towards God, and faith in Christ, which imply a new and heavenly mind, there is a voice of high authority, and everlasting truth, saying to you, as to the young man in the gospel, "One thing thou lackest." It is the great, the essential thing, the "one thing needful."—It is religion. "Thy heart is not right in the sight of God."

And should you persist in this impiety till overtaken with perdition, how painful must be your reflection, that nothing was required of you to be saved but to obey so reasonable, so excellent, so necessary a law, and to receive so gracious, so kind, so merciful a Saviour? Nothing was required of you, but what you could have done and should have done; nothing but what would have made yourself as well as others more useful and happy, both in the "life that now is, and that which is to come."

You had all needful opportunities; you were born of pious persons, or at least in a Christian land; were favoured with sabbaths, sermons, prayers, counsels, numerous and tenderly urged; many years had the Saviour bent over you with bleeding hands and inviting voice; often had his friends prayed and wept for you; but all was in vain! Will it not then be manifest that you wrought out your own destruction? And when the judgment shall have put the seal of eternity upon your character and condition, with what bitter sorrow must the language of despised wisdom visit your guilty and self-reproaching bosom, "Because I called, and ye refused; I stretched out my hand, and ye did not regard it; but ye have set at nought all my counsel, and would none of my reproof; I also will laugh at your calamity; I will mock when your fear cometh."

And then to think not only of the evil you have done to yourself, but of your evil and destructive influence upon others. By continuing in impenitence and irreligion, you encouraged others to do the same. It would seem to be enough to have gone to eternal ruin alone; but to have influenced others to follow you, to execrate you as a guilty cause of their perdition; this, as it seems to me, will be the most fearful ingredient in that cup of trembling, which a righteous judgment will press to the sinner's lips. This, I must believe, is the most terrible portion of what the Scriptures mean by

"indignation and wrath, tribulation and anguish."

And, finally, to think not only of the evil you have done, but of the good you might have done. You might have allied yourself to the Saviour of the world, in accomplishing a work in which angels would rejoice to engage. You might have been instrumental in promoting the glory of God, in extending his kingdom. You might have blessed earth and blessed heaven, healed the sorrows of humanity below, and added to the songs of the redeemed above. You might have sent the savour of your goodness down through all time and all eternity. You might have scattered its sweet perfume over your grave, and borne its fragrance thence to heaven at your resurrection. You might have beheld a multitude of shining spirits redeemed from sin, encircling the throne of light and glory, as the fruits of your obedience to God. You might thus have realized in your own person the fulfilment of the Divine promise, "They that be wise shall shine as the brightness of the firmament; and they that turn many to righteousness as the stars for ever and ever." Yea, the great King of the celestial world might have called you forth in the presence of angelic hosts, and placing a sparkling diadem upon your brow, have said to you, "Come, ye blessed of my Father, inherit the kingdom prepared for you from the foundation of the world. Thou hast been faithful over a few things, I will make thee ruler over many things; enter thou into the joy of thy Lord." Come up hither, and "sit with me on my throne; even as I also overcame, and am set down with my Father on his throne."

But all is lost, for ever lost! Say, dear youth, is not all this too much to lose? Listen, again, to the voice of God. Listen to it. "To-day, if you will hear his voice, harden not your heart." This warning slighted may prove fatal; this call refused may leave you in sin for ever.—*Hubbard Winslow.*

"MIND HOW YOU BEGIN."

A good beginning is desirable in all our engagements. In no one can it be neglected without injury, while its importance increases with their magnitude. To allude only to one instance, and that of frequent occurrence: much attention should be given by the young to their

outset in life: to this many owe their success; and to carelessness and imprudence here, may be traced the failure of multitudes. These results have been well exhibited by a narrative in "Chambers's Journal," in reference to circumstances which fell under the observation of its editors; we give it therefore as deserving the serious attention of our readers.

"In a certain burgh, which it is needless to particularize, wonned a worthy couple, who, by dint of persevering industry, had realized a handsome competence literally out of nothing. Their family consisted of one son, whose proper settlement in a respectable way of doing, as they themselves had retired from the cares of business, was now almost their only earthly concern; and as they had proved, in their own persons, both the misery of poverty and the blessings of independence, they thought they could not do better than rear him to the same line of business in which they had themselves succeeded so well. In process of time, accordingly, Mr. Thomas was installed in suitable premises in an excellent locality of the burgh, and an ample and valuable stock of goods was laid in; he was well connected, and still better recommended through his father's influence: on the latter account, too, his credit stood high in the trading world. In short, no young man in his way of business could possibly start in life with fairer prospects of success. On his own part, nothing seemed wanting to fulfil the expectations entertained by his friends. He was a sober, industrious young man, regular and correct in his private habits, assiduous in attending to his business, and, as his goods were both excellent and cheap, his customers every day increased, and every one thought he was rapidly and deservedly realizing a fortune.

"Guess the astonishment, then, of all and sundry, when, in about a year and a half after his opening shop, Mr. Thomas —, or rather his worthy sire, found it prudent to close it again; and the friends of the parties learned, that the paternal funds were minus a good many hundred pounds by the speculation. Here was a poser for the trading quidnuncs of the place! The matter was to them perfectly incomprehensible. It seemed like that which had hitherto been supposed an impossibility in nature—an effect without a cause. Mr. Thomas had been universally reckoned a perfect pattern

of what a man ought to be, who wished to thrive in the world. In fact, he had been held up to all the young men in the neighbourhood, as a model whereby to fashion their own conduct. Neither was he of an adventurous turn of mind, nor had he met with any serious losses in trade, to account for his "misfortune." As there was no feasible way, therefore, of explaining the matter, the usual verdict was, of course, passed upon the occasion, that, in spite of all Mr. Thomas's efforts and industry, "the world had gone against him." He was the victim of ill luck, or, to speak out plainly the meaning of their words, he was one "doomed by Providence not to thrive in the world;" and all, therefore, agreed in the propriety of his parents' withdrawing him, as they did, from the concerns of business to their little rural abode, as they said that "doing nothing was still better than doing ill."

Shortly after the event took place, a kind-hearted lady, who had been a steady customer and warm patron of Mr. Thomas ever since he "set up," and had all along admired his exemplary conduct, had occasion to call at his parents' abode about a servant's character, or some such matter, when she took the opportunity of expressing the surprise and regret of herself and friends at what had happened. "'Deed, Mrs. —," replied the sorrowing dame, "I'm sure we're a' much obleeged to yersel', and other weel-wushers, for your concern about Tam; but, ye see, the world just gaed against him, and we thoct it better to keep what we had left than rin the risk of losing a'." As the visitor did not appear altogether satisfied with this explanation, and seemed anxious to learn in what way the world had gone against him, the other continued—"Aweel, ye see, though Tam's a weel-behaved industrious lad, he just had na a way of managing things; and though he could mak siller easy enough, he wants the knack to keep it. I never could get him to understand the value o' siller, or to see that it was pence that made pounds—and the long and the short o't is, that Tam, like mony a ane, just began the world at the wrang end!" As this was a mode of proceeding through life which the lady had never heard of before, she begged a more particular explanation, and received the following, to which we would beg the particular attention of all young people

in Mr. Thomas's situation. "Ye see, Mem, when the guid man and me began the world thegither, we were just as bare as we weel could be—hardly ae sixpence to rub against anither, and no a friend to gie us a helping hand. So, Mem, we just suited our way o' living to our circumstances, and contented ourselves wi' a drap parritch and milk i' the morning, a herring and a potato, or sae, to our dinner, and our parritch at nicht again. By and by, as we began to mak a little, we had some guid broth and meat at dinner time, and after that a wee, we ventured on a drap tea in the morning. As things got better wi' us, the gude man wad whiles send hame a lamb-leg for our Sunday's dinner; and, Mem, before a' was dune, we used sometimes to treat ourselves to a chuckie, (chicken.) Now, ye see, Mem, our Tam took the clean contrair way o' going about things—he began wi' the chuckie!"

We now never hear of young men, placed in an advantageous situation for getting forward in the world, but who nevertheless, and without any apparent cause for their bad success, are unable to "get their head above water," but we are apt to suspect that they have "begun with the chuckie." We hesitate not therefore to repeat the charge, "Mind how you begin."

VAIN REPETITIONS.

"But when ye pray, use not vain repetitions as the heathens do: for they think they shall be heard for their much speaking."—Matt. vi. 7.

The following extract, translated from the books of the Buddhists, shows in a striking manner how just is the charge here brought against the Gentiles. It is a canon delivered by Fuh to be repeated for the extermination of all misfortunes, and for attaining life in the pure land Tolone; to be repeated three times.

Nan-mo O-me-to po-yay, to-ta-keä to-yay, to-te-yay-ta, O-me-le-to po-kwän, O-me-le-to, seeh-tan-po-kwän O-me-le-to, kwän-keä-lan-te, O-me-le-to, kwan-keä-lan-te. keä-me-ne, keä-keä-na, chih-to-keä-le, po-po-ho.

This prayer, or whatever it may be called, is as perfectly unintelligible to every Chinese as it is to a foreigner. Not one out of a hundred, even of the priests who daily use it in the temples, understand the meaning. It contains the bare sounds of Sangskrit words, expressed as near as can be in Chinese

characters, which are repeated by the priest as rapidly as they can be enunciated, he all the while tapping a wooden drum, in order to arouse the attention of the god. The editor of the book from which this is taken, adds, "This prayer is for the use of those who are travelling to life. The god Omoto (a name of Buddha) rests on the top of the head of those who repeat this, in order to save them from all their enemies, to render them safe and comfortable in life, and to confer upon them any mode of future existence which they may at the hour of death desire. When a person has repeated it twenty times ten thousand times, (or 200,000,) then the intelligence of Poote begins to bud within. When he has repeated it thirty times ten thousand times, (300,000,) he is at no distance from a personal appearance of the face of the god Omoto." In the passage of Scripture which this quotation is intended to illustrate, our Lord condemns the repetitions of the heathen, not merely from their utter fruitlessness in producing any salutary impression on the heart, or reform in life; but also from the motives of the persons in using them, which is, that they think they shall be heard for their much speaking. How forcible is the word "speaking" in this place, no one who has not heard the senseless mumbling of unintelligible sounds from the lips of a Buddhist priest, can fully appreciate. It is evident that the followers of Buddha expect not only present good, but also future happiness, for the sole merit which is supposed to be attached to their repetitions. In the work from which the above is extracted, there are a number of plates, representing various forms of Fuh, sitting on a lotus flower. Each form is surrounded by six dotted lines, springing from the lotus at the bottom, which terminates at the top, forming a pear-like figure. A note thus explains these dots. "On the right are nine plates, representing the lotus. The 5048 dots which their circling lines contain, are intended for the purpose of being marked with a red pencil, one dot for every hundred or thousand repetitions of the name of Buddha. After a long time, when the whole is filled up, they are to be again gone over with some other kind of ink. At the time of death, the plates thus filled up are to be burned to ashes, that they may pass into the other world as a testimony in favour of him who used them. De-

pending on the merit of this virtue, he goes to live in the pure land."—*Indo-Chinese Gleaner*.

DIVINE LIBERALITY.

God's liberality is altogether infinite in imparting his goodness and graces most copiously towards his creatures. He is prompt, ready, and free in his gifts; not like most men, who give grudgingly, niggardly, or with a half-closed hand, as though they would pinch away part of their benefits. He giveth superabundantly above what we deserve: for "he is rich unto all that call upon him; he is able to do exceeding abundantly above all that we ask or think." Abraham craved but a son of the Lord, as an heir of his goods, and God promised to multiply his seed as the stars of heaven, and as the sand that is by the sea-shore. And, which is the greatest of all, the Messiah and Saviour of the world was born of the same seed. Jacob desired only bread to eat and clothes to put on, and a safe return into his own country, and he had the angels for his keepers, and the companions of his peregrinations, a happy marriage, a numerous offspring, ample riches, great flocks, Divine visions, and sweet promises. Solomon asked only wisdom of the Lord, and along with that he receives incredible riches, a peaceable kingdom, and great glory, riches, and honour: so that among the kings of the earth there was none like unto him. Neither do there want examples of this in the New Testament. The woman of Samaria sought but for water to quench her bodily thirst, and she found the water of life, the Saviour of the world. "The thief on the cross craved of the Lord only to be mindful of him, and he heard these words from the Saviour, "To-day thou shalt be with me in paradise." Grace is so much more abundant than our prayers, that the Lord doth always bestow more than we crave." Seeing then that the liberality from God is so great in giving, let wretched men be ashamed of their slackness and slothfulness in asking.

INDOLENCE.

LAZINESS grows on people; it begins in cobwebs, and ends in iron chains. The more business a man has, the more he is able to accomplish, for he learns to economize his time.—*Hale*.



LAUGHING JACKASS.

Dacelo giganta.

THE kingfishers (*Halcyonidae*, Vig.) constitute a numerous family, divided into several genera, established on certain modifications of form which obtain among them. In these birds, represented by our well-known and beautiful species, (*Alcedo Hispida*), we are struck at once by the brilliant hues and metallic lustre of their plumage, which is, moreover, very smooth and close. Their long, straight, pointed beak, their short, feeble *tarsi*, and small toes, of which the outermost is united to the middle toe as far as the second joint, their stout and compact form, and their abbreviated tail, stamp them, independently of their colouring, with characters so marked and decided, that they cannot be confounded with the birds of any other group. Though not remarkable for length of wing, their flight is rapid and arrow-like; and as they dart along, they gleam like a passing meteor in the rays of the sun. Their food consists of fish; such, at least, is the diet of the more typical species, among which the common kingfisher holds a distinguished rank. Solitary, or in company only with its mate, and perched on some branch overhanging the water, may this splendid bird be seen, intently watching for its finny prey: the instant a shoal passes, singling out

its victim, down it plunges like a shot, and disappearing for an instant, rises with its captive, and returns to its previous station. Before swallowing the fish thus caught, it ends the dying struggles of the hapless sufferer by smartly striking its head against the branch on which it sits. This done, it reverses the position of the fish, and swallows it head foremost. The kingfisher does not, however, always watch on some perch for its prey; we have ourselves seen it hovering over the water, on quivering wings, at a moderate elevation above the stream, and then plunge with astonishing velocity upon some unwary fish within its range, with which it rises and darts away, either to its nest or to some lonely haunt, in order to kill and devour it. The nest of the kingfisher, if nest it can be called, is made in a deep hole worked out in the side of a steep bank, mostly by the exertions of the pair themselves; but they sometimes avail themselves of the deserted burrow of the water rat, which they enlarge to render it convenient. The nest consists of the disgorged bones of the fishes swallowed, (for, like the hawk and owl, the kingfisher disgorges the indigestible parts of his prey,) and upon this are laid the eggs, six or seven in number, and of a pinkish white. To this rude structure there are great and increasing additions:

the young brood are voracious, and the parents supply them abundantly; in the meanwhile, the *rejectamenta* collect around them.

In most birds we find the young long in acquiring an adult character of plumage: such is not the case in the present instance. The *close burnished* plumage of the kingfisher is essential to it as a *plunger* into the water; and as the young soon begin to gain their living by their own exertions, plunging for fish as do their parents, it follows that they likewise need the same sort of *clothing, and to need,* in nature, is *to have.* In this short abstract of the habits and manners of our common kingfisher, we have a general sketch of those of all the rest belonging to the more typical part of the family.

As in every other natural family, however, we find certain forms exhibiting a departure from the standard, a departure both in external characters and in habits and manners, to such an extent as to warrant a *generic* separation; one of such genera among the kingfishers is that termed *Dacelo*. Here instead of the close, metallic plumage and small tail, so characteristic of the genus *Alcedo*, we are presented with a clothing at once announcing that habits of plunging beneath the water for prey, are altogether out of the question. The ample tail cannot be overlooked: Shaw, indeed, in his "General Zoology," seizes upon this feature as the grounds of his division of the kingfishers into two groups, namely, the *long-tailed kingfishers*, and the *short-tailed kingfishers*; a division too loose and indefinite for modern science, but which, nevertheless, proves his views of the importance of these characters. At the head of this article, we give a figure of that very remarkable bird, *Dacelo gigantea*, (the *laughing jackass* of the colonists of Australia,) which affords us a good example of the modifications of form, to which we have alluded, as obtaining among the genera of the present family. A detailed description will not be out of place. The plumage is full and soft, and the feathers of the head are elongated into a crest. The bill is large, long, powerful, swollen at the sides, and the edge of the upper mandible at the tip is indented or scooped out, so that the point is acute, and bends over the point of the under mandible. The latter is wide, deep, strong, and sweeps with an upward turn at its extremity. The *tarsi* are very

stout, and the toes are furnished with sharp, curved claws. The wings are long, advancing, when folded, about half way down the tail. The tail is long, broad, and somewhat rounded. The eyes have a forward situation, being placed close to the base of the beak, and imparting a sharp, cunning, and even fierce expression to the aspect.

The colour of the *Dacelo gigantea* is as follows:—Top of the crest, brown; a white belt arising above each eye, goes round to the occiput; below this runs a brown belt arising behind each eye. The throat is white, which colour is carried on so as to form a broad collar round the neck. The wings and back are brown, some of the coverts of the former, and the feathers on the lower part of the back being slightly washed with a tint of pale metallic green. The tail is barred with rufous brown and black at its base, the outer feathers being barred with black and white over their greatest portion, but the two middle feathers are merely tipped with white. The whole of the under surface is dirty white, with pale, obscure wavy bars of dusky brown across each feather. Total length, 1 foot 6 inches; wing, 8½ inches; tail, 6 inches; tarsi, 1 inch; beak, from gape to point, 3 inches. The female is duller than the male, has a much smaller crest, and scarcely a trace of the gloss of green on the middle of the wings, or on the back. In its general form and aspect, no less than in general manners, this bird reminds us of some of the larger shrikes, the *Vanga destructor* for example. Bold and powerful, it sits on the watch for its prey, consisting not only of insects, after which it darts with great rapidity, but of small birds and reptiles, etc., which it destroys with much address. Its disposition is well depicted in the keen expression of its eyes, which seem as if ever on the "look-out" for some unwary victim. In captivity, which it bears very well, it will sit quietly, but earnestly, watching between the wires of its cage, every now and then breaking out into an abrupt "*laugh*," difficult to be described, but somewhat resembling the monosyllable, *yah-yah-yah*,—each note increasing in force and harshness. On its food being presented, it is all excitement and energy, traversing its cage, and manifesting, by every action, eagerness and spirit. It is from its peculiar notes that this bird has derived its popular cognomen; heard amidst the

gloomy woods of Australia, these harsh sounds produce a startling effect, and suggest, for the moment, the approach of some formidable beast intent upon his victim. Among the wooded mountain districts in many parts of Australia, and those especially which border the Murrumbidgee river, this bird is very common. A recent traveller, speaking of this part of Australia, says, "Among the feathered animals which abound here, is the *Dacelo gigantea*, better known to the colonists and strangers by the appellation of the 'laughing or feathered jack-ass.' Its peculiar, gurgling laugh commencing from a low, and gradually rising to a high and loud tone, is often heard by the traveller in all parts of the colony, the bird sending forth these deafening noises whilst remaining perched upon the lofty branch of a tree, watching for prey. It is respected by gardeners for destroying grubs, etc. The natives, at Yas, call it *Gogera*, or *Gogobera*, probably from its peculiar note, which has some (very little we think) resemblance to the sound of the word. It is said that one seldom laughs without being accompanied by a second. . . . This bird, from its devouring mice and venomous reptiles, deserves protection. A gentleman told me that he was perfectly aware of these birds destroying snakes, as he had often seen them carry the reptiles to a tree, and break their heads to pieces with their strong, sharp beaks; he also said he had known them destroy chickens soon after they were hatched, and carry away eggs, breaking the shell with their sharp beaks to get at the contents." On one occasion, he adds, a bird of this species was observed upon the branch of a tree, looking very stupid, and nodding as if asleep; on being shot, it was found that the bird had swallowed a small snake, part of which was still in the bill. "It is not uncommon to see these birds fly up with a long snake hanging from their beak, the bird holding the reptile by the neck just behind the head, and as the snake hangs without motion, it is most probably killed before being carried away. . . . This bird is the first heard in the morning, and the last among birds of diurnal habits at night; it rises with the dawn, when the woods re-echo with its gurgling laugh; and at sunset they are heard again," in dissonant chorus. How different are the habits and manners of the *Dacelo gigantea*, from those of our

brilliant kingfisher, the tenant of the lonely borders of our rivers, from whose unflinching supplies it obtains its appointed food. Both, it is true, live upon animal diet, and both are qualified for obtaining it; both agree in those *family* characters which band them together in one large group, but setting these points aside, they have little in common with each other. The banks of rivers, not dense woods, are the resort of our kingfisher; it is formed for plunging in the pursuit of fish; it rears its brood at the bottom of a dark burrow, and is silent and retired.

The *Dacelo gigantea* cannot obtain fish; it is not qualified for plunging into the stream; it is vigilant in the pursuit of small mammalia, reptiles, and insects, and haunts the densest woods. We know nothing respecting its nidification, but in all probability, it differs as much in this respect as in its other habits from our kingfisher. Comparing these two birds together, birds confessedly pertaining to the same family, we are forcibly reminded of the great law of variety which runs through nature. The Almighty Creator, as if to show to those who read nature aright, the unbounded extent of his power, has so diversified the forms of organic beings, so interwoven a chain of gradations together, as to astonish the student of his works. Nature, it may be said, in a certain sense, never remains stationary; never limits herself by isolating her groups; typical forms are only the starting points from which she proceeds, modifying them at every step; and thus she exhibits to our notice a maze of transitions from one given point to another, filling the interval between, and conducing to unite the extremes together. With respect to the kingfishers, (to speak with reference to our immediate subject,) taking the genus *Alcedo* as the standard, we trace on every side deviations from it, till at last we find such an alteration of outward form and of habits, as to lead us almost to doubt whether we have not wandered beyond the genuine boundary line. Yet, through the scale of modifications, those points are not deviated from, by which the immediate affinities of species or genera are indicated. As a family, the kingfishers are distributed over the warmer portions of every continent, but more sparingly in Europe than in any other division of the globe; indeed, the common kingfisher

is the only European example. The nearest group in alliance with them is that of the bee-eaters, (*Meropidae*,) a family distinguished, like that of the kingfishers, for metallic brilliancy of plumage, and exhibiting a similar formation of the feet, and, to a certain extent, of the bill also. For an account of that beautiful bird, the common bee-eater, (*Merops apiaster*,) we refer to an "Introduction to the Study of Birds," p. 133. Both belong to the fissirostral tribe of the passerine or insectorial order, a tribe including the goatsuckers, swallows, todies, etc., all remarkable for the width of their gape, which enables them to seize their prey during flight. They are appointed to thin the hosts of insects, which teem in numbers beyond calculation; a work in which they are all incessantly and actively engaged, with the exception, indeed, of the typical kingfishers, which, though insects may occasionally form part of their food, have the clear brooks and rivers assigned to them as their storehouse of provision. The *Dacelo gigantea* is indeed not only insectivorous, but, as we have seen, preys also upon reptiles; its size, its strength, and its powerful bill well adapting it for this necessary work of destruction. We may conclude by observing that a living individual of this curious bird is to be seen in the Gardens of the Zoological Society. M.

THE PERAMBULATOR.

SHOPS AND SHOP WINDOWS.

WHAT a bounteous banquet of costly viands is spread before an ardent-minded, grateful-spirited Perambulator! Not more certain is the bee to find honey in the cup of every flower, than he to find interest in every object which engages his attention. The goodly earth on which he treads, and the glorious canopy of the skies above his head, are kaleidoscopes, of ever-changing beauty and delight.

What a wide spread page is London for him to gaze upon! and how full of absorbing interest and instruction! Human life is there depicted: its glare and its gloom, its sunshiny joys, and its shadowy griefs.

It was after an hour's ramble with two inquisitive friends, through some of the busiest streets of London, and an attentive survey of every thing of a curious kind which met the eye, that I stopped opposite a shop window, to inspect the

various articles that were there presented to attract observation.

"It strikes me," said the friend on my right, "that an interesting series of papers might be written on the subject of shops and shop windows. All that is gay, and alluring, and ornamental, and useful, is crowded into a shop window, and spectators of every sort and condition, from the rosy-faced boy of four years old, to the hoary-headed greybeard of fourscore, press forward to gaze on the agreeable exhibition."

"It shall be done," said I; for the thought pleased me.

"But shops and shop windows is so homely a title," replied the friend on my left. "True," said his companion, "but it will improve on acquaintance; and the more I think upon the scheme, the more practicable does its accomplishment appear."

"The plan *may* succeed," said my hesitating friend. "It *must* succeed," responded the original projector of the design. "It *shall* succeed," cried I with enthusiasm; and taking out my note-book I began to make those observations, of which the following are a part:—

Here is a grocer's shop, but the profusion, the absolute prodigality of the scene oppresses me. There seems enough of grocery in the window to supply the neighbourhood. The fresh, fragrant, and delectable teas in the finely formed wooden bowls are enticing; to say nothing of the ample chests, lined with lead, and ornamented by Chinese artists, whose contempt of perspective is so well known. How significantly the mandarins bow their heads, and beckon with their hands! what beautifully painted canisters! what stores of coffee, chocolate, and cocoa! what boxes of figs, and loaves of refined sugar!

And the raisins and currants, the spices and the candied lemon peel! Oh, how the Christmas times of my youth burst upon me at the very sight of them!

Days of my youth, the long pass'd years
Of childhood round me rise;
I see them, glistening through the tears
That start into my eyes.

The joys that round my bosom press'd
When thoughtless, young, and wild,
Come like a sunbeam o'er my breast—
Again I am a child.

Well do I remember (who does not remember?) the scenes of far-famed Christmas in days gone by. A dozen

of us, light-hearted, laughter-loving, giggling boys and girls, are seated at a supper table, whence the older guests have just retired. Roast beef, and turkey, and cold fowls, and ham, and tarts, and custards, and jellies are before us; with mince pies in abundance. We are roving like bees from one sweet to another. Present, past, and future, all is happiness. Turn the trencher, and blind-man's buff are in prospect, and mulled elder wine and toast, before we break up for the night.

But shall I be wiser, and tell you where the commodities in the grocer's shop and window come from? Oh yes, for if you do not know, it will be useful information; and if you do, others may not. With all the amusement we can gather, there is no going through the world in a creditable manner without a little knowledge.

Raisins are brought from Spain and Turkey, currants from the Isles of the Archipelago; lemons grow in Portugal, Spain, and Italy, and spices as well as sugar, are the produce of the East and West Indies.

The latter article is brought to England in hogsheads. See! there are two empty ones standing at the door, with a swarm of flies and a crowd of boys round them. One youngster is picking the sugar from the bung-hole; another is reaching up to the top where the rough hoop and rusty nails are likely enough to tear his ragged jacket; and a third has his head and body in the cask with his legs in the air, like a duck getting up something from the bottom of a shallow pond. There they are, all licking their sugary fingers, and smiling.

A friend of mine, who is a dear lover of cheerfulness, once gave me this advice: "Whenever you get into a corner among a set of people unreasonably silent, afraid to speak, or even to smile, say to them at once, 'What a hubbub a score of kangaroos would kick up in a plantation of dry sugar canes!'" and if that observation does not provoke a little merriment, you may give them up as perfectly incorrigible."

I never see a sugar cask at a grocer's door, without thinking of the kangaroos and the sugar canes.

I might say a great deal about the poor negroes, who have so much to do with sugar—

Though the chains of slavery are ordered to be broken, many are still bound by the fetters of ignorance. The mighty cry of outraged humanity has ascended to the throne of Heaven on their account; and He who sitteth there will not hold him guiltless who withholds the debt of mercy that is due for the past. If we have deeply injured negroes in this world, let us ardently help them on their way to a better.

Tea is too important an article to be passed by without a remark. You know, as well as I do, that the tea plant grows principally in China and Japan; but you may not know the following particulars:

The order of the East India Company, to their agent in Bantam, in 1668, was to send home 100lbs. weight of "goode tey" as a speculation. A very pretty speculation this turned out to be; for the consumption of tea has been raised in the United Kingdom, by the East India Company, from 100lbs. as above, to nearly 32,000,000. It seems almost incredible, and yet it is not to be disputed, that during eighteen years the immense sum of 70,000,000*l.* was paid into the British exchequer as revenue collected on the tea leaf.

Tea has produced to England a commerce amounting to upwards of 8,000,000*l.* sterling; that is, in imports and exports, yielding an annual revenue to the British exchequer of 3,300,000*l.* It has also promoted the health and morals of the people.

Pekoe is the leaf buds, picked early in the spring, sometimes mixed with olive flower for fragrance, hence the term "white blossom tea." I hardly think that you were aware of this.

Congo, Souchong, and Bohea take their names from the districts where they grow, or the mode in which they are prepared. Green tea differs from black by being dried in iron pots over the fire, while black is dried in the open air under a shade, and afterwards in a heated warehouse. Black tea improves by keeping, but this is not the case with green. The Chinese prefer black tea, ten or fifteen years old, if it has been kept from the atmosphere.

We are purblind beings at the best, and cannot fathom His almighty counsels whose "ways are not as our ways." The tea trade, which we only regard as a source of luxury and temporal profit, may one day, by the Divine permission and blessing, be a battering ram to

knock down the wall of China, a key to unlock the hearts of the Chinese, and a channel through which a flood of gospel light may flow, to illumine the three hundred millions of pagans which the "celestial empire" contains.

What have we here? An oil and colour shop; where they seem to sell many things: oils, vinegar, mustard, salt, and soap; honey, bees' wax, and emery; black lead, glue, sponge, and pack-thread; brushes, brooms, blacking, door mats, tobacco, snuff, pipes, and candles.

About five hundred years ago, candles were so great a luxury that splinters of wood, dipped in oil or grease, were used for lights. Why the thought of reading and writing by the light of a greasy piece of wood is enough to make one look on a candle with gratitude, to snuff it with double care, and to regard it as a friend.

Tobacco is cultivated in America, the West Indies, and other places. It was first introduced into Europe by Jean Nicot of Nismes, agent from the king of France to Portugal, who procured the seeds from a Dutchman, and sent them to France. It is smoked as cigars, and in pipes, and is chewed by thousands of soldiers, sailors, and other people. Pipes are made of a soft white clay; they are formed in a mould, the hole in the tube is made with a wire, and then they are burnt in an oven.

Do you see the oils and colours, the reds and the blues, the greens and the yellows? West, when he began to paint, pulled hairs from a cat's tail to make him a pencil; but painting brushes are plentiful here. Here are materials for a new school of painters, an absolute academy of Hogarths, Rembrandts, Raffaels, and Guidos, Titians, Teniers, Poussins, and Paul Potters. When you next look at a real Vandyck, a Godfrey Kneller, a Murillo, or a Carlo Dolce, you may think more highly of an oil and colour shop.

How eloquent might I be about industry, as I look at the bees' wax and the honey pot; about the British navy, while I gaze on the pitch and the tar tub; and what strange things in music does that lump of rosin bring to my remembrance! I could brighten up in my remarks at the very sight of the ball of lamp cotton, while the spermaceti puts me at once on board a whaler, bound to the icebergs of the northern ocean.

Now I shall have a treat, for this is the shop of a mercer, and linen and

woollen draper. What a magnificent window! It makes me afraid to look in, lest some one should jostle me against the splendid panes of plate glass. They are of unusual dimensions. How tastefully are the goods arranged! A Cashmerian need not be ashamed of these shawls! A Persian might be proud of those silks! how the muslins and prints wave, like streamers in the doorway! and then look at the huge rolls of superfine broad cloth, that remind one of an English squire of the olden time, with his good old dame beside him;

"He in English true blue, buttoned up to the chin,
And she in her broad farthingale."

What a fine mirror is that at the end yonder, doubling the shop's length to the eye, and multiplying the gas lights in the evening. With what complaisance and courtesy the well-dressed shopmen attend to their customers! How cleverly that youth cleared the counter, by placing his hand upon it and springing over. Do you observe the lady on the right seated, carelessly examining the different articles before her? that is the twentieth piece of silk the shopman has shown her, yet he is still active and obliging, although she has at present purchased nothing.

See here, I would not have passed these plaids and tartans for a crown. There are the tartans of the Frasers, and the M'Phersons, the Abercrombies, the M'Farlans, the Camerons, and the Duke of Montrose. The blue dark ground with broad bars of green I remember well, it is the tartan of the 42nd Regiment; it prates about the broad sword. The red ground with large squares, crossed with black, is that of Rob Roy; and the most lively of all, the small squares of red and green, barred with black, is the glowing tartan of the M'Duffs.

I know not if these things affect you as they affect me; but as I look at the window, every article serves me as a text. Try if you cannot mend the sorry sermons that I make from it.

They breathe of other things to me,
Of mountain air, and of liberty;
Of tower, and tree by lightning riven;
The storm, and the warring wind of heaven.
Of mossy cairn and cromlech grey,
And mad'ning sounds of feud and fray;
Of stern contention—hope forlorn—
And banner rent, and tartan torn.

The draper himself is attending some ladies who are in a carriage at the door. With what a bow he takes leave of them! It seems to express the greatest humility and attention. Surely the business with

which they have charged him will be faithfully performed, if human energy can accomplish it. Other ladies have now come in, and he dismisses his former customers from his thoughts, but not until he has spoken quickly to one of his shopmen who notes down where certain parcels are to be sent. The man in the desk, at the end of the shop, is the cash keeper. When money is received, it is taken to him: he is a check on all the shopmen and apprentices.

There is something to be seen in these places; but when you visit them, take not your wife and daughters with you, unless you have a full purse; for a mercer's shop rivals even that of the milliner in attracting the attention of the ladies. What pains we take to decorate the poor, perishable body! and how negligent are we of that imperishable guest within us which is to live for ever in weal or woe!

If the draper's shop possesses many attractions for the fair, the tailor's window is greeted with frequent glances of the manly eye. Let us first notice that large coloured engraving conspicuously placed to display the fashions of the day. There are sketches of gentlemen riding on horseback, or walking with ladies; or exchanging salutations with each other. How very well dressed, and yet how stiff and passionless! Their faces have no more natural expression, than the busts in a hairdresser's shop. That velvet waistcoat, or as they now call it, "vest," is fit for a monarch to wear, and yet the printer's apprentice over the way has his eye upon it; in a week or two we shall see if he wears the same waistcoat that he does now.

What heaps of figured silks! what gorgeous patterns! what vivid colours! See, they have attracted the eye of the dashing young fellow passing by. He gazes, hums a tune, and goes on; they are not exactly to his mind. The tailor himself is behind the counter; his face is pale, and he looks unhealthy. In spite of his fashionable dress, he cannot conceal certain deformities of figure, a stoop in the shoulder, and a leg bent outward. These distortions have been occasioned by close application at the shop-board during his apprenticeship; he has long since left off work, although, occasionally, he will display his skill in cutting out a coat, to convince his foreman that he has a master who knows the business as well as himself.

How carefully he is examining his

ledger! to some a hateful volume. What long arrears are there! He shuts it up; his countenance seems to have acquired asperity by the perusal. How sharply he speaks to his shopman who is carelessly folding up some pieces of broad cloth!

There is a confusion in the street; a wild bullock is running along, driving the people before him. How quickly the tailor fastens his door! he actually trembles; his shopman, too, appears alarmed, while the butcher on the other side of the street is running out of his shop with a firm countenance: let us notice him, for he, too, is worthy of observation.

Well may the butcher live opposite the tailor, for in character they are antipodes.

The countenance of the man is jolly and rubicund, with a display of coarse wit and humour in the eye; nothing like unhappiness is to be read there. The blue dress has been worn by the trade from time immemorial. I do not know why; one would think that red would be the more appropriate colour.

Mark with what precision the strong armed man uses the cleaver. That stroke went through flesh and bone with a crash unpleasing to the ear. See how adroitly he shears off that collop with his knife horridly keen, having just been hastily whetted on the steel at his side. His customer asked for a pound, and he has cut off exactly a pound and a quarter; his knife errs inwardly by system. I dare say he could cut a pound within an ounce, if it suited him.

His boy is scraping the bench with a knife, and cleaning it with a cloth and warm water. A dog has crept in, and is making off with a piece of offal picked up under the bench; he has not escaped the quick eye of the butcher; the hungry brute has been kicked on the sides and is running away, howling with affright and pain. Why is it that a butcher's shop is less ornamented than any other? Is it because the public would think it ridiculous to place plate glass and brass work before pieces of raw flesh? or is the butcher so proud of his meat that he thinks any decoration would hide a beauty? Perhaps the chief reason is the necessity of having the shop well ventilated.

With what pleasure that old gentleman seems to handle the sirloin there! if it were part of a dead horse, or of any ani-

mal to which he was unaccustomed, he would start back with disgust. The lady with her servant bearing a basket, appears quite at home and at ease amongst the joints : but not so the poor woman in the old red cloak bargaining for a piece of the coarsest meat ; care renders her uneasy, she is no chooser ; poverty and hunger are not nice : she thinks only of the price, and is not particular about the quality. I know her well, a deserving creature, with a weakly frame, and a drunken husband. To her "that is afflicted pity should be showed." She has but ninepence : I saw her count it in her hand, though she well knew what it was before. The butcher is not hard with her. See how cheerfully he throws the piece down on the bench as he turns off to another customer, calling out, "Well, take it along with you, Missis." The poor woman is going away with a brighter countenance. Success attend you, master butcher, and may you meet with good orders from the rich to repay you for your liberality to the poor !

Perhaps, for the present, I have said enough to convince you that shops and shop windows may be made a source of much amusement, and some instruction. You may look at the same windows again and again, with advantage ; for the articles and commodities exposed for sale are almost endless. I have merely ventured a few remarks on such of them as have struck me in a rapid glance ; you may turn them to a more profitable account.

What a busy world is this ; and how selfishly we spend our time ! whether walking in town or country, where we meet with one rendering a kindness to another, ten are occupied in serving themselves : and, on the average, notwithstanding the shortness of life, where two hundred are busily employed in the affairs of time, scarcely will two be found attending to the things of eternity.

THE RUINED TEMPLE RESTORED.

MAN was originally the temple of Jehovah ; an earthly but yet a magnificent structure, designed to show forth the power and wisdom which could raise a fabric so glorious from materials so vile. But sin entered and marred this beauty. It entered the temple, and in one short hour, this noble piece of

Jehovah's workmanship became a mournful ruin. Some traces indeed of its original glory may still be discovered, but to what do they amount ? They serve only to show the greatness of its degradation ; how high man might have risen, and how low man has fallen. His lofty understanding overthrown ; its powers, formed to contemplate God and know him, so shattered, that they cannot scan without an effort the meanest of his works, baffled in their proudest strength by an insect's wing, and taught their weakness by a blade of grass ; his affections, too, that once soared to the skies, now grovelling on the earth, rooting themselves in the ground as though they could find in this accursed ground their rest and their happiness : all within man testifies of some sad overthrow ; all is disorder, havoc, and desolation.

But look again at this ruined creature. The blood of Christ has ransomed, and now the grace of Christ transforms him. In the very hour when he becomes the Lord's, a work of restoration is commenced within him—a rebuilding, a cleansing, an adorning ; a process of renovation that never ends, till it brings shape and beauty, and glory, out of a mass of ruins. And this is sanctification ; that exercise of Divine power on the human mind, which gradually restores to it its original excellence. It does more ; it prepares the mind, not for paradise, but for heaven.—*Bradley.*

HARMONY OF THE SCRIPTURES.

THE Scriptures are distinguished by their completeness. All the portions of each inspired book are in harmony with the rest, and all these books fit into each other, forming one complete system, where the same great truths are again and again represented with the utmost simplicity, and where all the useful applications of these truths are unfolded in every variety of light and position. The whole form of the Scriptures, which consists in the continual evolution of one Divine plan, gives every facility for discovering and contemplating sacred truths, exhibited as they are from their earliest disclosure to their full accomplishment.—*Douglas.*



Henry VII. bestowing a Grant on a Monastic Establishment.

ENGLISH HISTORY.

HENRY VII.

HENRY VII. was proclaimed king on the battle-field of Bosworth. After resting two days, he proceeded towards London, which he entered on August 28, 1485, when he offered his three principal standards at St. Paul's Church.

Though he entered London in a closed car, probably as a measure of precaution, he was received with much applause; for the popular hope was, that the rival claims of York and Lancaster would now be ended by a union of the two houses. Pageants were exhibited before the coronation, which was deferred till October 30, on account of the sweating sickness which then first visited England. This disease was especially fatal in London, where two mayors and six aldermen died in eight days.

The title of Henry VII. to the throne was very defective. Supposing Edward v. and his brother were both dead, the right of succession remained in the Princess Elizabeth, the eldest daughter of Edward IV. Next to her and her sister, was the earl of Warwick, son to the duke of Clarence, a youth of fifteen. One of the first cares of Henry was to send orders from Leicester that this young earl should be conveyed from Yorkshire to the Tower of London.

Nor was Henry's title from the house
APRIL, 1839.

of Lancaster a valid one, Catherine, the widowed queen of Henry v., married Owen Tudor, a private gentleman of Wales. Their son was created Earl of Richmond, and married the heiress of Somerset, a branch of the Lancastrian family, by an illegitimate son of John of Gaunt. The earl died soon after his marriage, leaving an orphan son, afterwards Henry VII. In 1470, Henry VI., during his short restoration, seeing young Richmond, then a lad about fourteen, is said to have pointed him out as likely to have the crown. The attention of both parties was thus drawn to young Richmond. After the battle of Tewkesbury, his uncle thought it necessary to convey him to France for safety, but being driven to Bretagne by a storm, they were detained there in a sort of honourable captivity for twelve years; when the nobles who combined against Richard, called Richmond to England, and placed him on the throne. His accession was in reality the act of these leaders; his title was confirmed by marriage with Elizabeth of York, the true heiress; but Henry chose to rest it on his Lancastrian descent, which if it had been valid, would have placed his mother, then living, on the throne before him, as the immediate descendant of the Somersets. She was an exemplary character; and the universities were indebted to her for consi-

derable benefactions ; but her family had been excluded from the throne on account of their descent.

According to these views, a declaration was procured from the parliament, which met directly after the coronation, setting forth that the inheritance of the throne was in Henry VII. and his heirs. The results of the civil wars still appeared in the small number of the lay peers ; only twenty-nine assembled in parliament on this occasion. Henry for a time seems to have desired to avoid the marriage with Elizabeth, but finding the popular feeling was in her favour, and the commons having urged this alliance, he caused the marriage to be solemnized in January, 1486. Although she was an amiable and beautiful princess, Henry always treated her with indifference, or even aversion, perhaps, because she was a favourite with the nation, by whom her title to the throne was deemed preferable to his own.

Among the early proceedings of Henry, was an act of attainder against some of the Yorkists. He selected his earliest adherents to be his confidential ministers, rewarding those who deserted Richard's party, but not placing much trust in them. He consulted his personal safety by appointing a body guard of fifty men ; these have since been continued under the title of " Yeomen of the guard ;" their dress has been the same from the first formation of the body. In all his proceedings, Henry displayed much caution and prudence, showing himself really anxious to promote the national welfare. He was twenty-nine years old when he obtained the crown : fourteen years spent in adversity had taught him wisdom, at least in worldly matters.

In the spring of 1486, Henry made a progress through the northern counties, which afforded an opportunity for Lord Lovel, an adherent of Richard, to withdraw from the sanctuary at Colchester, where he had taken refuge. He planned an attack upon the king on his way to York. Lovel's force appeared, and had nearly intercepted Henry, when the earl of Northumberland joined the royal train with a large body of supporters. An offer of pardon being made, Lovel withdrew to the continent, leaving his followers, who dispersed. Soon after the king's return from his progress, a prince was born at Winchester, and named Arthur. This event occasioned general

rejoicings, an undoubted heir to the throne being now declared. But the position of Henry was still insecure. Like all others who obtain power by force, he could not confide in those to whom he owed his elevation. His chief safety arose from the non-appearance of any opponent.

Early in 1487, an opponent was produced. A report was spread that the young duke of York was alive in Ireland. This rumour was soon corrected, and the lad in question was said to be the earl of Warwick, son to the duke of Clarence, whose memory, as their governor, was still cherished by the Irish people. They were attached to the York family, the first claimant to the throne having been their ruler. This youth was said to have escaped from the Tower. Margaret, duchess of Burgundy, the sister of Edward IV. who deeply hated Henry, promised her assistance ; the Irish nobles gave their support. Henry caused the real earl of Warwick, (the son of Clarence and grandson of the king-making earl,) to be carried in procession through the streets of London, convincing the people in general that he was still alive and a prisoner, so that the claimant of his name must be a pretender. He was, in fact, a youth named Lambert Simnel, the son of a baker, at Oxford, instructed by a priest named John Simon to assume and act this part. Lovel, and the earl of Lincoln, the nephew of Edward IV., the leaders among the Yorkists, were convinced of the deception, but resolved to avail themselves of the popular feelings, and to support the impostor for a time, till they could release the real Warwick. They proceeded with 2,000 German soldiers, from the continent to Dublin, where the youth was proclaimed king. The earl of Kildare, the governor of Ireland, was a Yorkist ; expecting to be displaced by the reigning monarch, he was inclined to support any other claimant of the throne.

Henry was not careless ; he caused the widowed queen of Edward IV. to be confined in Bermondsey Abbey ; the ports were guarded ; an army was assembled at Kenilworth, on hearing that his opponents had disembarked in Lancashire. The armies met at Stoke, near Newark. The earl of Lincoln, Lord Lovel, and Martin Swart, a German commander of great note, who was the leader of the invading troops, all fell in the conflict, unless, as was reported,

Lovel escaped to one of his own houses, where, many years afterwards, a skeleton was discovered in a secret apartment, the head reclining on a table. Lambert and his tutor were taken, his adherents being entirely defeated, after a severe struggle. Henry wisely treated his captive with contempt, making him a scullion, but afterwards promoting him to the office of under falconer. Warned by this insurrection, the king caused the queen to be crowned, knowing that it would be a popular measure.

The king of France, at this period, invaded Bretagne. The popular voice called upon Henry to prevent this accession of power to the French monarchy; he was also from gratitude bound to protect that country; but averse to war, he entered into a secret treaty with Charles. Though compelled to send a body of troops to the continent, Henry soon withdrew them, and assented to the marriage of the French king with the heiress of Bretagne, a new course which that monarch adopted as best calculated to secure his object. Meanwhile, Henry raised large sums from his subjects on the pretext of a war with France, chiefly by what were called benevolences, a sort of forced gift. This plan was promoted by Archbishop Morton, the chancellor, who used a double argument, urging that those who lived frugally could the better spare something for the king, while those who lived expensively ought not to expend all upon themselves, forgetful of the claims of their monarch. The collection of these imposts created discontents, especially in the north, where the earl of Northumberland was killed in a popular tumult.

Henry was at length obliged to engage in war with France, but after undertaking the siege of Boulogne, in 1492, he allowed the French king to purchase a peace. In the same year, another prince, afterwards Henry VIII., was born. During this interval, another, but more carefully matured plot, had been carried forward. Reports were circulated that the duke of York had been spared by those who engaged to murder his brother and himself. In 1492, a young man came from Portugal, and suddenly appeared at Cork, in Ireland, who declared himself to be the individual in question. He was welcomed as such by the Irish, or rather by the inhabitants of the limited eastern district in that country, then acknowledging the authority of the English mo-

narch. From thence he soon proceeded to France, where he was encouraged by Charles, and joined by many English exiles. Peace being made, he visited the duchess of Burgundy, who received him with honour, publicly acknowledging him as her nephew, but not without an appearance of doubting his claim, that she might pretend to make a public investigation of his pretensions. His behaviour was consistent with the character he assumed: he resembled Edward IV., and gave a plausible account of his escape, with many minute circumstances respecting the court of England during his early years, such as the young duke of York might be supposed to remember.

These particulars were industriously circulated in England, where they were readily credited by many persons of station and influence. Henry, therefore, imprisoned Tyrrel and Dighton, the surviving murderers, and published a statement of their confessions. The exact declarations were not given to the public; the death of Forrest, the most hardened of the three, probably left some deficiency in their depositions, which rendered it unadvisable to submit them to the remarks likely to be made, though they spoke decidedly as to the actual murder of the princes. The king made preparations to resist invaders, and employed agents to discover who the claimant of the throne really was. The result of this inquiry was a statement, that one Perkin Warbeck or Osbeck, supposed to be the son of a Flemish Jew, asserted himself to be the son of Edward IV., to whom he bore considerable personal resemblance. Some persons said, that monarch was his godfather, while others looked upon him as an illegitimate son of Edward. The agents who gave this account, also induced Sir Robert Clifford to purchase his own pardon by disclosing the plans of the Yorkists, several of whom were immediately arrested.

The precautionary measures of Henry were characterized by firmness. Being informed that Sir William Stanley secretly countenanced the pretender, the king caused him to be arraigned and executed in February, 1494. When we consider, that Henry owed his crown to Stanley, this is an instance of the ingratitude of princes, and it warns all who act treacherously towards others that they may expect to be entangled in their own devices. The wealth of Stanley was also a cause why an avaricious monarch

availed himself of the opportunity for murder and confiscation. Covetousness is indeed the root of all evil, hardening the heart, and inclining it to deeds of blood. Other severe proceedings were resorted to about this time.

In July, 1495, the claimant appeared on the coast of Kent, his supporters were few; about a hundred and fifty, who landed, were seized and put to death. Their leader returned to Flanders, from whence he proceeded to Ireland, but Poynings, sent thither by Henry, had secured that country. He went on to Scotland: James iv. received him as the duke of York, and married him to the lady Catherine Gordon, daughter of the earl of Huntley. Early in 1496, a Scottish army entered England with the pretender, but not being joined by the English, they returned after ravaging Northumberland.

This invasion gave Henry a pretext for farther taxation, which was very unpopular. The people of Cornwall rose, and headed by Lord Audley, marched towards London, passing on to Blackheath, where they encamped. In this position, they were attacked by the royal forces, on June 22. The rebels were defeated and dispersed; Audley, Joseph, a farrier, and Flammock, an attorney, the leaders, were hanged.

Scotland was in its turn invaded by the earl of Surrey, when king James consented to terms of peace, and engaged to send Perkin away. The pretender, after visiting Ireland, landed in Cornwall, assuming the title of Richard iv. Having made vain attempts upon Exeter and Taunton, he left his followers, and took shelter in Beaulieu Abbey, in Hampshire. Upon promise of pardon, he submitted to be taken to London. After some time, he fled to the sea coast, but being unable to escape, returned to Sheen priory. He was led from thence, and placed in the stocks before Westminster Hall, where he read a confession that he was an impostor, after which he was sent to the Tower. His wife had been taken in the fortress of St. Michael's Mount, in Cornwall, but was treated with kindness, being made an attendant on the English queen. There appears no cause to doubt his being a mere pretender, or that the real duke of York perished with his brother. The subject, however, has been discussed with much plausibility of argument in favour of Warbeck. It is remarkable, that in several instances, where personages of note have disappeared by vio-

lence, their title has been assumed by others. Thus it was with the famous Don Sebastian, of Portugal, in the sixteenth century; while in our day the example of Perkin has been followed by persons who have pretended to be the unfortunate Louis xvii.

Another pretender arose shortly after; one Ralph Wilford, a Kentish youth, who, at the instigation of an Augustine friar, personated the earl of Warwick. This shallow device was soon brought to an end; the poor lad was hanged, and the friar condemned to imprisonment for life.

By some proceedings, which are not clearly explained, Perkin was enabled to escape from the Tower, in company with the real earl of Warwick, an ignorant and half-witted character. They were soon retaken; Perkin was hanged at Tyburn, the son of Clarence was beheaded. There is reason to believe that the whole was a device of Henry, planned that these wretched prisoners might by their conduct afford a pretext for violent measures against themselves. He succeeded, but "woe unto him that buildeth his house by unrighteousness." "Woe to him that coveteth an evil covetousness to his house, that he may set his nest on high, that he may be delivered from the power of evil! Thou hast consulted shame, to thy house by cutting off many people, and hast sinned against thy soul," Jeremiah xxii. 13. Hab. ii. 9, 10.

From the time of these murders, for such they were, the success and comfort of Henry began to decline, although his situation had much that appeared prosperous. Spain sought his alliance; while other continental princes showed him honour and attention, inducing him to take part in their affairs. In the year 1500, another pestilence visited the land; twenty thousand inhabitants of London are said to have died. The king removed his court to Calais.

In the first year of the sixteenth century, two royal marriages were solemnized, the results of which were most important to England. Catherine, princess of Arragon, was united to the English prince Arthur. He died in the following year, but Henry vii., unwilling to restore the dowry of the Spanish princess, amounting to 60,000*l.*, caused her to be affianced to his younger son, prince Henry, having obtained a dispensation from the pope, who claimed power to do away with the laws of God and man, and

to allow Henry to marry his brother's widow. The actual celebration of the marriage was deferred on account of prince Henry's youth. The results of this inauspicious union were overruled to prove most beneficial to England. It produced the Reformation, freeing the nation from the tyranny and yoke of Rome. The other marriage was that of the princess Margaret to James IV., king of Scotland; this led to the union of the two kingdoms, a measure advantageous to both. One of Henry's counsellors advised against this connexion, lest it should place a Scottish king on the throne of England; but Henry, with wiser views, said that was not a matter of importance, England was the largest kingdom, and would be the seat of government. In 1503, the princess, then fourteen years of age, was forwarded to Scotland. She had to perform this long journey on horseback, except being occasionally carried in a litter when passing through any large town. She entered Edinburgh sitting on a pillion, behind the Scottish monarch her husband.

In 1502, Cardinal Morton died, to whom Henry was mainly indebted for the throne; this death was followed in the next year by that of his queen, to whom he owed his securing it. The king was now become more eager than ever to accumulate wealth. Empson and Dudley, his two ministers, used every means of extortion, by fines, wardship, and false accusation, as well as by direct taxation. Among other instances of severity, was the laying a fine of 10,000*l.* on the earl of Oxford, for clothing his neighbours and tenants in livery, when visited by the king. A salutary law had lately been passed, forbidding this course with respect to any who were not regular house servants, which diminished the power of the nobility, by not allowing them to keep large bodies of idle retainers. Such enactments, though severe, were reconcileable with the main principles of justice. In 1503, the Chancellor, in his speech to the parliament, enlarged upon justice, with due execution of the laws, being the great support of kingdoms, which without it were but dens of robbers. This is true; still law is a dangerous weapon, and too often misused.

The earl of Suffolk, nephew of Edward IV., fell under suspicion of plotting against the king; he escaped to the continent, but was secured in 1506, when the archduke of Austria, who had been

driven into Weymouth by a storm, was detained till Suffolk had been induced to come over. The earl was then imprisoned, Henry undertaking to bear all the dishonour of the transaction. Tyrrell, the murderer of Edward V., being implicated in this plot, was executed.

A marriage between the king and the duchess of Savoy, who had a large dowry, was now planned. Philip proceeded to Spain, where he was acknowledged king of Castile, but died in a few months, when Henry gave up his claim upon the duchess of Savoy, and sought the widowed queen. This plan could not be carried into effect, as her reason gave way under her loss.

In 1505, Henry thought of marrying the dowager queen of Naples, but finding she had no jointure, he relinquished his intention. Gold ever was his idol. He continued his accumulations, even after he had stored in his coffers 1,800,000*l.* sterling, equal in value to about 25,000,000*l.* at the present day. Some portion of these treasures he increased by lending on usurious terms, and occasionally he made loans for commercial purposes, free of any charge of interest, knowing that in the end his resources would be benefited thereby.

Henry's health gave way; at fifty-two he was sinking into the grave. Then he thought to purchase heaven, with part of his ill-gotten wealth. He caused all debtors imprisoned in London, for small amounts, to be set at liberty; founded a noble addition to Westminster Abbey, and largely contributed to other ecclesiastical edifices. A gilt silver box was also to be presented to every church in England, which did not already possess a repository for the host or consecrated wafer. He ordered his son to make restitution of the sums his hateful ministers had unjustly extorted, and declared that if his life were prolonged, he would be a changed man; but his chief reliance was placed on the penances enjoined by the church. After twenty-seven hours of fierce agony, during which he called upon the Saviour for deliverance, he expired on April 21, 1509. He had pierced himself through with many sorrows, in common with all who make undue haste to be rich. His call for deliverance reminds us of the words of Scripture, "When your fear cometh as desolation, and your destruction cometh as a whirlwind; when distress and anguish cometh upon you. Then shall they call

upon me, but I will not answer; they shall seek me early, but they shall not find me; for that they hated knowledge, and did not choose the fear of the Lord. Therefore shall they eat of the fruit of their own way, and be filled with their own devices," Prov. i. 27—31.

Still we should be thankful that we are not required to pronounce judgment upon the final state of any fellow mortal, though we must not trifle with the awful declarations of the Divine word against the ungodly and covetous.

The reign of Henry was useful to England. He succeeded in staying the rage of civil discord, and breaking down the power of the nobles, or rather, he prevented it from reaching its former height, after the civil wars. He chose his chief ministers from the ecclesiastics, but was not disposed to admit the continuance of the unbridled licentiousness of the clergy. He also found many of them disaffected to his government; it is remarked that each of the three leading plots against him, was promoted, if not formed, by a priest. He therefore set forth severe declamations against the luxurious and vicious lives of the clergy, strenuously contending against their being independent of the civil power. Still they secured themselves from suffering death for any offence, even for murder. The diminution of the idle retainers of the nobles, induced many to turn their hands to the pursuits of industry, while the nobility had money to spare for the encouragement of manufactures. Thus, much was done to lessen the paramount power of the nobility, while the Commons rose in proportion. Henry saw the necessity of freeing the royal power from the domination of the nobles and ecclesiastics, and of resting it on the interests of the community at large. To effect this, he also maintained peace, being well aware how much the interests of a nation are promoted by freedom from warfare. Fines and exactions also were means which he used to depress the power of the nobles.

Henry strove to encourage commerce, though the laws enacted, through the mistaken policy of the age, often enumbered the efforts they were designed to promote. Henry had agreed with the brother of Columbus, the discoverer of America, to furnish the requisite means for his voyage of discovery to the west; but the detention of Bartholomew by pirates, delayed his return, till Christo-

pher had made those final arrangements with the king of Spain, which gave Spain the empire of the west. After this, Henry sent out John Cabot, and his sons Sebastian and Sancho, with letters patent, "to sail to all parts of the world, under his flag, with five ships, to discover new countries, and to take possession of them as his governors and deputies, paying him one-fifth of the profits; and to import their merchandize free of all custom duties." They discovered Newfoundland, and the main coast of North America. We may rejoice that England did not incur the guilt that brought reproach on Spain from her acts in her western empire, which have proved a bitter curse upon that kingdom. Far better were the commercial advantages which eventually accrued to England, from the discoveries of Cabot.

"'Tis thus the band of commerce was designed
To' associate all the branches of mankind;
And if a boundless plenty be the robe,
Trade is the golden girdle of the globe.
Wise to promote whatever end He means,
God opens fruitful nature's various scenes;
Each climate needs what other climes produce,
And offers something to the general use.
No land but listens to the common call,
And in return receives supply from all."

COWPER.

Henry obtained a bull from the pope, authorizing the reformation of the monasteries. In 1490, Morton put this into effect with regard to the abbey of St. Alban's: the result of inquiry proved the abbot, and many of his monks, to be guilty of the vilest profligacies. Even murders were frequently committed by the ecclesiastics. The depraved state of the clergy appeared also from the monitions issued by the archbishop Morton, who rebuked the clergy for spending their time in ale-houses, laying aside the dress of their order, and wearing swords and daggers, which they were at all times ready to use. Still, the king gave countenance to persecutions for religion, and thus brought himself into the same condemnation as his predecessors. His devotion to the church of Rome was manifest, though he was not ignorant of its errors. He complied with the religious fashions of that day, and in several years, about Lent, paid for ten thousand masses to be recited for his benefit. The engraving prefixed to this article, represents the king bestowing a large grant on a monastic establishment.

Some were burned for heresy in this

reign; among them, in 1494, was a widow of eighty, named Joan Boughton. She was enabled to declare that she thought but little of the fire, since it would but take her to the presence of Him who loved her. The most atrocious act of papal cruelty was the burning of Tylsworth, at Amersham, in 1506, when his own daughter was dragged to the pile, and compelled to set fire to it by a torch held in her hand. The spot is still pointed out, where this dreadful atrocity was perpetrated by the persecuting church of Rome.

Upon the whole, Henry VII. possessed many commendable qualities; he showed much wisdom in promoting whatever he considered the welfare of his people. The adversities of his early years had evidently much improved his character, though the original defect of obtaining the crown by force, with his constitutional avarice, led to many acts of severity and oppression, rendered him unpopular, and brought down trials upon himself.

Among the legislative enactments of this reign, we must notice the important law, making the alienation of landed property effectual by the legal process called levying fines. This tended much to break the power of the nobility, by affording facilities to the sale of their landed estates, while the giving security to purchasers, encouraged buyers, and led many persons to invest in land the profits of increasing commerce. Many other laws, with reference to legal proceedings, the encouragement of trade, and the prevention of frauds, might be mentioned. Though some amongst them were founded on principles since found to be mistaken, by limiting the exertions of industry, and fixing the price of commodities, yet Henry should be commended for having acted according to the best of his abilities; he certainly perceived that a free interchange of commodities was for the advantage of all parties concerned. One establishment of this reign was the Star-Chamber; so called from the stars on the roof of the apartment where the judges sat. This was a summary court of judicature, which assisted the royal power by its course of proceedings, but these were subsequently abused, so as to become tyrannical and oppressive.

The depopulation caused by the civil wars and by pestilence, was shown by various enactments to restrain the extent of sheep-walks, now found more profitable to the agriculturist than the

raising of corn. So low was the price of wheat, that at the commencement of this reign, ten days' labour of an artizan would purchase a quarter of corn.

MOLLUSCA.—No. III.

MEANS OF SECURITY AND DEFENCE.

It is delightful to trace the exact adaptation of its circumstances to the animal—a result which an attentive observation of the works of God will constantly manifest. To sail down a smoothly flowing river, or over the bosom of a placid lake, requires an apparatus but ill adapted to the mighty deep, which may suddenly be roused to the fury of the storm. A due provision is therefore made by human skill; and an analogy, marked by manifest superiority, is found in the Divine operations. Of this one interesting example may be given. The *Pinna*, or Marine Muscle, when it inhabits the shores of tempestuous seas, is furnished with the means of withstanding the fury of the surge, and securing itself from dangerous collisions which might easily destroy the brittle texture of its shell. By this it prepares what is called a *byssus*, that is, a great number of threads, which are fastened at various points to the adjacent rocks, and are then tightly drawn by the animal. These threads are composed of a glutinous matter, prepared by a particular organ. They are not spun like the threads of the spider or the silk-worm, by being drawn out of the body, but they are cast in a mould, where they harden, and before they are employed, acquire a certain consistence. Most curious is the construction of this mould: a deep groove passes along the foot from the root of the tendon to its other extremity; and its sides are so formed as to close and fold over it, thereby making it into a canal. The glutinous secretion which is poured into this canal, dries into a solid thread; and when it has acquired sufficient tenacity, the foot is protruded, and the thread it contains is applied to the object to which it is to be fixed; its extremity being carefully attached to the solid surface of that object. The canal of the foot is then opened along its whole length, and the thread, which adheres by its other end to the large tendon at the base of the foot, is disengaged from the canal. Finally, the foot is retracted, and the same operation is repeated.

In this manner, thread after thread is

formed, and applied in different directions round the shell. Sometimes the thread is imperfect; but the animal, as if aware of the importance of each one being put to the test, tries it as soon as it has been fixed, by swinging itself round, so as to put it fully on the stretch. When once the threads have been fixed, however, the animal does not appear to be able to cut or break them off.

The liquid matter out of which these threads are formed, is so exceedingly glutinous as to attach itself firmly to the smoothest bodies. It is slowly produced; for it appears that no pinna is able to form more than four, or at most five threads in the course of a day or night. When the animal is disturbed in its operations, the threads which are hastily formed are more slender than those which are leisurely constructed. Reaumur states also, that the marine muscles are able to form these threads from the earliest periods of their existence; for he saw them practising this art when their shells were not larger than a millet seed.

Poli says, with respect to the byssus of muscles, which have all of them this faculty, that it is of the same structure with hair, and that, at the extremities, it is furnished with little cups or suckers, by which it adheres so firmly, that the muscles can only be drawn from the water in great bunches. Some species are entirely enveloped with this substance.

The shell of the *Pinna ingens* is said to be often two feet long, and the threads are scarcely inferior in beauty and fineness to those of the silk-worm. Separately, they possess but little strength; but an immense number of them is sufficient to secure the creature in a fixed situation. Some naturalists call it, "the silk-worm of the sea."

In one genus, *Anomia*, there is in the upper valve of the shell near the hinge, an aperture, closed by a kind of operculum or lid, formed at the dilated extremity of an internal muscle, and it is by this part that the animal fixes itself. In another, the beak of the lower valve turns up, overhanging in some degree the upper valve; and in this beak is a notch or aperture through which the fixing tendon passes. What an admirable instance have we here of variation in the means, when required by circumstances, to gain the same end! Nor is this all: it was necessary that the valves should not be reversed; a tendon through the lower valve secures

this in the first of these animals; but in the second, when the overhanging beak would interfere with this purpose, the tendon issues from the beak itself, so as to enable the animal still to fix itself with the proper valve downwards. Who then will refuse a tribute of praise to the All-wise God?

The great *Clam* is a very remarkable creature. We are told by Linnæus, that one specimen weighed 498 English pounds; that the inhabitant furnished 120 men with provision for a whole day; and that the sudden closing of its valves was sufficient to snap a cable asunder. A manuscript in the library of the late Sir Joseph Banks, also notices the dimensions of a specimen brought from Sumatra, and preserved at Ano's Vale, in Ireland: the weight amounted to 507 pounds; the largest valves measured four feet six inches in length, two feet five inches and a half in breadth, and one foot in depth. A shell of the same species forms the baptismal font at the church of St. Sulpice in Paris; it was presented by the Venetians to Francis I. And yet these shells suspended their vast bulk by means of a strong byssus. Below the hinge is a large opening, through which the animal passes a bundle of tendinous fibres, by which it is suspended to the rocks, however large and weighty its shells, and thus it is enabled, under the direction of instinct, to fix itself securely!

THE GREAT FAIR OF RUSSIA.

"WHAT has become of the Fair (of Nishnei-Novogorod)?" — It was the very question which we ourselves had been putting ever since we had entered the place. After passing the gates, not a single symptom of it had we seen. Turn this way, however: from the Volga and Asia look in another direction—across the Okka—and there, on a low almost inundated flat, exposed to the waters of both these rivers, lies a scene of bustle and activity unparalleled in Europe. A vast town of shops, laid out in regular streets, with churches, hospitals, barracks, and theatres, now tenanted by more than a hundred thousand souls, but in a few weeks to be as dead and silent as the forests we have been surveying: for when the fair is over, not a creature will be seen out of the town, on the spot which is now swarming with human beings. Yet these shops are not the frail structures

of canvas and rope, with which the idea of a fair is associated in other countries. They are regular houses, built of the most substantial materials, and are generally one story high, with large shops in the front part, and sleeping-rooms for the merchant and his servants behind. Sewers, and other means of maintaining cleanliness and health, are provided more extensively even than in the regular towns of Russia. The business of the fair is of such importance that the governor of the province, the representative of the emperor himself, takes up his residence in it during the greater part of the autumn. There is a large and handsome palace built for him in the centre, accommodating a train of secretaries and clerks numerous enough to manage the revenues of a kingdom.

The fair may be about a mile from the centre of the city, but much less from the outskirts, to which, in fact, it is united by a long wide bridge of boats across the two arms of the Okka, and a line of good houses along the steep and difficult slope leading to the bank of that river. This slanting street is filled with a countless throng from morning to night—carriages, wagons, droschkies, pedestrians, uniting to form the only scene out of England, except, perhaps, the Toledo of Naples, that can be at all compared to the crowds of Ludgate-hill or Cheapside.

Immediately on leaving the bridge, the fair-ground begins. This part is always crowded with labourers looking out for employment, and cossacks planted among them to maintain order. Then come lines of temporary booths, displaying objects of inferior value for the lower classes, such as beads, trinkets, and some other articles of dress, especially caps. Of these last, a great variety is displayed: round turbans of short curly wool from Astrakan, here called crimmels, because the best is furnished by the lamb of the large-tailed sheep imported from Crim Tartary; high black Kirghis bonnets made of wool resembling hair; and flat gold-figured cowls from Kasan. These booths stand in front of coffee, or rather tea-rooms, laid out with little tables, and eating-houses large enough for two or three hundred to dine in with comfort, and at any price, from two pence to two pounds.

This is not an idle, holiday meeting, but a place of business. The Nishnei

buyers are rich merchants and grave bankers, who have here their whole fortunes at stake. This fact, however, only renders the scene more worthy of the survey on which the reader has been invited to accompany us. First advances a white-faced flat-nosed merchant from Archangel, come here with his furs. He is followed by a bronzed long-eared Chinese, who has got rid of his tea, and is now moving towards the city, to learn something of European life before setting out on his many months' journey home. Next come a pair of Tartars from the Five Mountains, followed by a youth whose regular features speak of Circassian blood. Those with muslins on their arms, and bundles on their backs, are Tartar pedlars. Cossacks who have brought hides from the Ukraine, are gazing in wonder on their brethren who have come with caviar from the Akhtubia. Those who follow, by their flowing robes and dark hair, must be from Persia; to them the Russians owe their perfumes. The man in difficulty about his passport is a Kujur from Astrabad, applying for aid to a Turkoman from the northern bank of the Gourgau. The wild-looking Bashir from the Ural has his thoughts among the hives of his cottage, to which he would fain be back; and the stalwart Kuzzilbash from Orenburg looks as if he would gladly bear him company, for he would rather be listening to the scream of his eagle in the chase than to the roar of this sea of tongues. Glancing in another direction, yonder simpering Greek from Moldavia, with the rosary in his fingers, is in treaty with a Kalmuck as wild as the horses he was bred amongst. Here comes a Truchman craving payment from his neighbour Ghilan, of Western Persia, and a thoughtless Bucharian is greeting some Agriskhan acquaintance, sprung of the mixed blood of Hindoos and Tartars. Nogais are mingling with Kirghisians, and drapers from Paris are bargaining for the shawls of Cashmere, with a member of some Asiatic tribe of unpronounceable name. Jews from Brody are settling accounts with Turks from Trebizond. In short, cotton merchants from Manchester, jewellers from Augsburg, watchmakers from Neuchâtel, wine-merchants from Frankfort, leech-buyers from Hamburg, grocers from Königsberg, amber-dealers from Memel, pipe-makers from Dresden, and furriers from Warsaw, help to make a crowd the

most motley and most singular that the wonder-working genius of commerce ever drew together.

Schnitzler and the other authorities state the annual value of goods sold here at 125,000,000 roubles, or 5,000,000*l.* sterling; but we were assured by a gentleman filling a high situation that this is only the official value given in to government by the merchants, which always falls short of the real value sold. "It is notorious," he says, "that in order to escape the payment of part of the duties, the merchants never give the true value of their stock." There has also been a great increase since the time to which this statement relates; so that the real amount of money turned over in the place may now be fairly estimated at 300,000,000 roubles, or twelve millions sterling!

The streets of this city of shops are as regular and as wide as those of the new town of Edinburgh. The cross ones are about the same length as the lines from Princes street to Queen street; the main ones, probably three times as long. Their number, as well as the magnitude of the business done here, may be estimated from the fact, that the rents drawn from them for the very short period of the fair amount to eighteen thousand pounds (445,000 roubles.) One quarter goes by the name of the wooden shops; but the principal divisions are all built of stone. Most of the streets have elegant light arcades on each side, supported in front by thousands of cast-iron columns, where purchasers can walk about, well sheltered in all kinds of weather, to view the tempting displays in the windows.

The shops are generally very handsome, and in some instances extend from street to street, so as to have two fronts. They present nothing of the confusion of a fair; the goods of every kind are as neatly ranged as in a city. An enumeration of all the articles exposed for sale would be impossible; there is literally nothing wanting, from the heaviest articles of commerce to the very lightest; from cathedral bells to ostrich feathers. A great deal of space is taken up by the more bulky articles, made in the country, such as ropes, wooden implements, domestic and agricultural; nails, doorbands, etc.; raw hides, hats, and winter-boots, with furs, and all the commonest kinds of clothing. To facilitate business, there is a separate quarter set apart for

each different kind of the more important descriptions of goods. One quarter contains groceries, of which the value sold is very great. In another, fish and caviar are exposed in most fragrant variety; of these, about sixty thousand pounds worth are sold at each fair. A third quarter contains leather articles of every kind, which may be bought surprisingly cheap; but, in particular, boots and shoes are here disposed of, ready-made, in great quantities. Morocco leather, for which Russia is so famous, is also sold wholesale to a very large amount: a great deal of it comes from Astrakan, where, as in other parts of European Russia, goats are kept, for the sake of their hides to make this leather with, more than for their milk or flesh. The agreeable soap of Kasan is sold to a large value. Iron articles from Toula, and glittering arms of every description, occupy a conspicuous share of the streets. The cloth range is also large and well stocked: the value of woollen goods, Russian and foreign, sold annually, is seldom less than 3,000,000 of roubles (120,000*l.*) But one of the most curious of all is the tea quarter, which occupies the greater portion of an immense division, standing by itself. This is one of the most singular corners, not only from the number of Chinese seen in it, but also from the great amount of cash turned over by them. The chests are all sewed into tough skins. One quarter contains ready-made clothes of all descriptions; the cloaks, both for men and women, are made from stuffs with the most singular patterns. Some of the figured works from Asia are really very beautiful. The quarter for fancy articles—gloves, handkerchiefs, ribbons, canes, etc.—is always crowded with purchasers. The division for wines is not very large. That for cotton goods appeared to be very valuably stocked.

Most of the articles had an English look; but among the thousands of dealers assembled here from all other towns we met with only one countryman. Of cotton goods, Russian and foreign, the value sold generally averages twenty-two millions of roubles (880,000*l.*) The gaudiest display of all is among the numerous shops for silks and shawls. Most of these articles being of oriental manufacture, the patterns far outshine even the waistcoats of our modern beaux. The manufactured silks here disposed of every year are estimated at ten millions

and a half of roubles (420,000*l.*); while of raw silk 308,000*lbs.* are sold. Nothing surprised us more, however, than the furniture shops; costly tables, chairs, sofas, all the heaviest articles of furniture, brought in safety to such a distance, and over such roads, were what we did not expect to meet, even in the universal emporium. Large mirrors, too, from France as well as St. Petersburg, and crystal articles from Bohemia, were displayed in great profusion; and many a longing eye might be seen near the windows of the jewellers and silversmiths, who are said to do a great deal of business, not only in selling their home-made articles, but also in buying jewels brought from Asia.—*Bremner's Russia.*

OLD HUMPHREY ON THE WILLOW PATTERN.

ONCE heard of a pious old man, who was so anxious that his children and children's children should tread in his steps, that he was determined, as far as it was possible, to keep the injunction, "Fear God," continually before them. In considering how he might best manage this matter, he thought of many plans. "If I tell my children to fear God," said he, "they will most likely forget my charge; and if I write it down on paper, or in a book, it is ten to one but they will lose the book or the paper on which it is written." At length it occurred to him to cut the letters F G very deeply in the bark of an oak tree which grew exactly opposite his house door. Having done this, he explained to his sons that the signification of the letters was, Fear God.

In the course of time, the old man "slept with his fathers;" but though he died, the tree flourished, and for many generations held up to his posterity the injunction he was so anxious to impress on their hearts. It is true that the bark of the tree grew, and at last almost filled up the letters, but that signified but little, for their meaning was so well known and so mercifully blest in their influence, that as long as the slightest trace of them was left, their signification was not forgotten.

Seeing, then, the great advantage of gravating a lesson on the heart by keeping it before the eye, I have been casting about to hit upon some method of fixing, like a nail driven in a sure place, a few

plain remarks in the memory of the different members of a domestic circle. I think that at last I have succeeded.

There is, perhaps, hardly a family from Newcastle-upon-Tyne to the Isle of Wight, from the South Foreland, in the county of Kent, to the Land's-end in Cornwall, altogether ignorant of the willow pattern, as it appears on tea cups and saucers, plates and dishes, mugs and jugs, ewers and wash-hand basins; for of all blue patterns that have ever been sent forth from our public potteries, no one can, I think, be so popular as this: go where you will and when you will, in town or country, if you look for it, you will not be long without finding it.

In thousands of habitations, the willow pattern makes its appearance at breakfast, dinner, tea, and supper; nay, before the first meal, and after the last, it attracts the eye, depicted as it is on the jug and wash-hand basin.

This being the case, it has struck me that if I can in any way connect a few Scripture subjects with this well-known willow pattern, the instruction like the injunction of the old man cut on the oak tree may be perpetuated; it may rise in the remembrance of many in the every day walks of life long after Old Humphrey has passed away and been forgotten. The books in which his homely observations are printed may be moth-eaten and destroyed, while his remarks on the willow pattern may be still fresh in the memory.

It may be that some will look upon this as an ingenious device, while others may be of opinion that the plan is but a poor one. The latter may possibly say, "What! is the old gentleman such a simpleton as to suppose that hungry people will sit stupidly staring and musing on the willow pattern, instead of heartily enjoying the acceptable meal spread before them?" Why no, I am not quite so simple as to expect this; but there is plenty of time in the occasional pauses of most of our meals, to glance at the willow pattern, and to indulge in a momentary reflection.

While I write down these remarks, I have part of a blue dinner service of the willow pattern before me. Not one word have I to say in commendation of the design, for never sure did unhappy artist collect together a more preposterous group of unnatural objects. But this will not matter; a man may hang a very useful coat on a poor peg, and serve

up a capital sirloin on a brown earthen dish.

Did you ever hold in your hand one of the old copies of Quarles' Emblems? If you have not, and if a good portion of its contents is not in your hearts, most sincerely do I pity you. Most likely however, you know the book as well as I do, and if so, I ask you, if you ever thought the worse of it on account of the odd pictures it contains? So far from this being the case, these odd pictures have endeared the book to you, and graven many of its glorious truths on your minds. If any one were to tear out of my old copy the cut of the church being led into the villages, having the words underneath, "Come, my beloved, let us go forth into the field; let us lodge in the villages," Cant. vii. 11; or that of the church violently weeping, with the words, "Oh that my head were waters, and mine eyes a fountain of tears," Jer. ix. 1; it would be like tearing away the grey hairs of my head. I hope that I should forgive the deed, but I hope, also, to be spared being put to the trial.

Then again, look at the old edition of Pilgrim's Progress; did you ever see more strange and uncouth representations of humanity than are there to be found? But do these in the slightest degree lessen the love of our hearts for John Bunyan, or for the pious and profitable outpourings of his almost inspired pen? Not one jot. Again and again we look at Christian at the cross, with his burden falling from his back, and on Mr. Greatheart fighting with Giant Despair, and we would not willingly change them for pictures designed by Raphael, and engraved by Bartolozzi. I have seen the new editions of Pilgrim's Progress, and unfeignedly honour the talents that have decorated them with such excellent illustrations; but the prepossessions of my boyhood, and the prejudices of my age alike cry out, "I would not part with my thumb-marked, dogs-eared, leather covered old copy for one of the modern kind, even though it were printed on the finest paper, gilt round its edges, and in morocco and gold!"

Trusting that I have said enough to justify my present design, I will proceed at once, in a kind hearted spirit, to make my remarks; and I hope that before you read further you will place on your table before you a willow-pattern plate, dish,

or dish cover, like those that are now lying before me.

You will readily agree that none of us read the Bible too much, and that most of us require to be reminded from time to time of its contents. The willow pattern, odd as it is, may serve to bring before us some of the most important events mentioned in holy Scriptures. First, then, let me notice the two trees; the willow tree, nearly in the middle of the pattern, and the other large tree at the back of the temple.

These rude representations of trees may serve to remind us of those which grew in the garden of Eden, "the Tree of Life in the midst of the garden, and the Tree of Knowledge of good and evil." What miseries have sprung from the first act of disobedience of our first parents! and what disastrous effects are continually following our own disobedience of God's requirements! Surely, surely, we should regard favourably every object that reminds us of the fearful consequences of despising God's commands, and the great advantages of obedience to his Almighty will. If the two trees of the willow pattern should set us thinking of this matter, they may do us good; and the round dumpling-like leaves of the one, and the caterpillar foliage of the other, may thus be regarded with complacency.

Turn now to the watery space as set forth in the willow pattern, and think for a moment of the wide deluge that once overwhelmed the world. We read of the flood as an historical event, and rarely realize in our minds the lesson it sets forth. How fearful must sin be in the eyes of God, when it moved him to destroy the fair world that he had made!

I can fill up this blank space in the willow pattern, with all the natural consequences of the deluge. I can see the surprise, the consternation, the horror of the drowning, and hear their shrieks of agony and unavailing cries for help! It was sin that wrought this unheard of destruction. Should not the flood then pursue us with, as it were, a mighty cry, If God spared not the sinners of other days, "take heed lest he also spare not thee."

The vessel there riding on the waters, bears but little resemblance to Noah's Ark, and it would certainly have answered my purpose better, had it been differently represented; but we must take things as

we find them, and make the best of them. If it be not like the ark, it may at least bring the ark to our remembrance, and that is all which, at the present moment, is required.

True it is that neither beasts, nor birds, nor creeping things are set before us as entering into the floating vessel; nor can I persuade myself that the figure standing up to row the boat, bears any strong likeness to the patriarch Noah; but if you are willing to be profited, you will not be particular about this matter. He who is thirsty will be thankful for a draught of spring water, whether it be handed to him in a crystal glass or an earthen porringer.

The question we should put to ourselves should be, not, Is this boat or vessel like Noah's ark, or does the figure in it resemble Noah? But rather, Have we entered into the ark that God in mercy has prepared for his people, to save them from the deluge of sin which has overspread the world? Have we fled for refuge to the hope set before us in Christ, and do we know that broad and deep as the flood is, "He is able to save them to the uttermost that come unto God by him?"

I am looking now at the two birds in the willow pattern, and I can fancy that you are marvelling much at the strength or rather stretch of that imagination which can discern in them any thing like an outline of the raven and the dove that went forth out of the ark; but perhaps you have regarded them hastily. Look at them again; examine them a little more closely.

Observe the bird on the left hand; for it seems to be weary, and sorely blown about by the winds. Let us put it down at once for the raven which "went forth to and fro, until the waters were dried up from off the earth." The other bird we shall have less trouble in imagining to be a dove, for not only is it of a more comely shape, but it is flying back again in the direction of the ark, as though it had "found no rest for the sole of its foot." Believer, are the waters of trial and affliction abroad on the earth, and is there no abiding rest for the sole of the foot? Do as the dove did! Fly confidently to the refuge prepared by Divine love, and One, more merciful than Noah, shall pull thee in unto him into the ark, until the flood has subsided, and the dry land shall again appear.

Towards the bottom of the willow

pattern is a zig-zag fence or palisading, which makes a division between one part and another. A kind of boundary to the pleasant premises which seems to say, "Hitherto shalt thou come, and no further."

This may well bring to our minds that hedge of thorns, the salutary and necessary restraint of God's commandments, which the Father of mercies has cast around his people. Christian, wilt thou walk in the way of the Lord, or wilt thou wander in strange pathways? Art thou content to do only what God has commanded thee to perform, and to possess only what he has promised to give thee, or wilt thou go out of bounds, eating of the forbidden fruits, and worshipping the strange idols of the Canaanites, the Hittites, the Perizzites, the Jebusites, the Ammonites, the Moabites, the Egyptians, and the Amorites? Look again at the zigzag palisades, and be instructed not to wander from thy peace, by wandering from God.

But the bridge on the left hand of the willow pattern must not be passed by, for it is the road, and the only road, narrow though it be, from the land on the left hand to the fairer spot where stands the temple in the midst, with its pillars and ornamental roofs.

Are we not on our pilgrimage to a better country, and is not the narrow way we have to walk in

"A bridge of glory o'er the grave
That leads beyond the skies?"

It is a way to the building of God, the house not made with hands; to the city with the golden gates. A way from the wilderness to the promised land, from gloom to glory, from earth to heaven. The three figures on the bridge are going the wrong way, they are turning their backs on the temple. Let us act a wiser part, and bearing in mind who it is that hath said, "I am the way," walk in it, keeping our faces Zion-ward every step of our pilgrimage.

And now we come at last to the temple in the middle of the willow pattern. Sure enough it is a poverty stricken fabric wherewith to symbolize the heavenly Jerusalem; but we may well excuse this, for we know that if it were a correct resemblance of Solomon's temple itself, in all its glory, it would be but a poor and imperfect type of the golden city. A common finger-post, however, may point us to a place of importance, and if this

poor temple should direct our thoughts to that glorious abode which requires no temple, the Lord himself being the temple thereof, why we shall not be out of temper with the odd form and grotesque proportions of the temple in the willow pattern.

While scribbling down these remarks, I have fondly figured to myself that many an indulgent reader of Old Humphrey, while sipping his coffee in a morning, will muse on the plate beside him, after taking from it his last piece of toast or bread and butter, and trace, one by one, the several resemblances pointed out by me. Now, if some quiet, cogitating Christian friend should, in such a case, have presented to his mind reflections much more profitable than those in which I have indulged, he will not think unkindly of me in having drawn them forth.

The thought, too, is pleasant to me that some worthy dame, or sober-minded matron, may so far humour the whim of Old Humphrey, as to open the leaves of the Visitor at her tea-time, to compare my remarks with the uncouth figures on her cups and saucers. In all this I may be but deceiving myself, and whether or not, the matter must now take its course. We read of the bells of the horses being inscribed with "Holiness to the Lord;" why not then attach to our household comforts, some scriptural and profitable remembrance?

My pen has run its length, and whether it has been idly or advantageously employed will depend on the use you make of my observations. I would fain persuade myself that you will regard them favourably, and with this impression on my mind, I will briefly sum up the profitable points of the willow pattern.

By the two trees, we may be led to think of paradise, and the state of innocence in which our first parents once lived. By the water, of the deluge of sin which has overspread the world. By the vessel, of the ark of safety, the hope set before us in Jesus Christ. By the two birds, of the return of God's favour to the world, after sin had occasioned its destruction. By the fence, of the salutary restraint of God's holy law and commandments. By the bridge, of the narrow way in which we should walk, and by the temple, of that everlasting state of blessedness prepared for the people of God.

THE WATCHMAKER.

JUNOT, a young man, a watchmaker by trade, was so remarkable, no less for the superior tone of his language, than for his religious zeal, that many strangers in Geneva sought him out, and among them an elderly English baronet. Their first conversation made so great an impression upon the Englishman, that he repeated his visits to the watchmaker's very frequently, entering into long discussions with him on religion. At length, when he was about to return to England, the baronet said, "Junot, it is you who have directed me to the path of happiness and salvation. You have given me that peace of mind, which I never before enjoyed, and sought for in the world in vain. My years here may be few, but I shall remember you on my dying bed."

During the six following years, Junot received no intelligence of his foreign friend; but, at the end of that period, he was sent for, by one of the principals of a banking house in the city, who informed him, that he had exceedingly important intelligence to communicate, namely, that Sir N.——— was dead, and bequeathed him a considerable sum.—"Will you believe me when I say, no less than fifty thousand francs?" "That is indeed a heavy burden: still if God imposes it on me, I must bear it." "Yet, what if it should be much more?" "I should say that the Lord sends it in order to try me." "Well, then, do not be overcome by your good fortune, when I inform you that, having neither children nor any near family connexions, Sir N.——— has left you the sole inheritor of his property, which amounts at the very least to six millions of francs. All the requisite documents and papers have been transmitted to me from England; and it remains only for you to give me formal directions to receive the money for you." "I hope that it may not be a snare on the part of Satan, to estrange the hearts of myself and my poor children from God, and allure us to the service of the world and Mammon."

Many will perhaps think that this extraordinary apathy was for the most part, if not entirely, assumed, in order the better to conceal a manifestation of joy, altogether indecorous. Yet this most astonishing change of fortune produced no change, either in Junot or his wife, nor did it occasion any difference in their former habits and mode of living. This

was certainly not owing to hypocrisy, unless we choose to stigmatize with the same odious title many instances of what has hitherto been considered heroic virtue. Had Junot lived in an ancient instead of a modern republic, his name might have been ranked with those of a Fabricius and a Cincinnatus.

Another instance of simplicity of manners is recorded of the Genevese Syndic, Marc Pictet, great uncle to the late eminent Pictet Diodati. He paid a visit one evening to the French resident, and on his taking leave, the diplomatist accompanied his guest to the antechamber, calling out for M. le Syndic's people. "Sir," replied Pictet, with a smile, "all M. le Syndic's people amount to no more than my maid Joan and her lantern!"

—Notes Abroad, by a Veteran Traveller.

THE FIRST SCEPTIC.

OUR first parents soon tasted the bitterness of sin, in their exclusion from the lovely garden they had inhabited in the days of innocence. But their sufferings were not increased by its being said, "Let them be written childless;" for these were alleviated, and the heart of Eve speedily rejoiced in the birth of a son. Her feelings appear, indeed, to have been peculiarly excited; her offspring was called Cain, which means a *possession*, for she said, "I have gotten a man from the Lord." It is supposed by some that she imagined her child to be the promised seed, who should bruise the serpent's head; but though she erred in this respect, she was right in recognising the Giver of the boon. In this respect, she is worthy of imitation by all parents, who should remember that "children are the heritage of the Lord;" and that, therefore, they ought to be trained in his "nurture and admonition."

This interesting family was further increased by another child, who was called Abel, meaning *vanity*, or a breath of air; perhaps from his having a more delicate frame than Cain; or, it may be, that the idea of the promised deliverer not having come produced a sense of painful disappointment which thus found expression. Ah! the fond parents, as they gazed on their offspring, could not pierce the clouds overhanging the future, nor perceive their opposite character and destiny. The name of

Abel has become proverbial for righteousness, and that of Cain as the seed of the wicked one.

Surely, then, a voice addresses those sustaining the parental relation. It says, "Guard against favouritism." Watch and pray against idolatry; it may appear in undue attachment to a child, as well as to a coffer of gold; and whatever be its form, it is always attended by the curse of the Most High. He who is thought to promise much, may disappoint your hopes; he of whom little is augured, may attain to eminence. "If it should please God," said a father, "to take any one of my children, I hope it will be my son Isaac;" and yet that child became the truly eminent Dr. Barrow. To each one of our offspring parental duty should be devoutly and faithfully done, and then the result may be left with God.

The occupation of Cain and Abel as they increased in years, was very different; the latter was "a keeper of sheep," but the former "was a tiller of the ground." The engagements of pastoral life were most probably peculiarly adapted to the modest, retired, and contemplative spirit of the younger; while the elder, robust, energetic, and impetuous, betook himself to the culture of the soil, which, though bringing forth "thorns and thistles," in consequence of the sin of man, promised, perhaps, more gratification to his feelings, and an ampler reward for his toil. Various, indeed, are the situations of human life. To

—"drop into the niche,
We were ordained to fill,"

should be an object of individual solicitude. To be able to say, "I am where God would have me to be," is a privilege of no common value. Still it is open to our enjoyment; for it is written, "In all thy ways acknowledge Him, and he shall direct thy paths," Proverbs iii. 6.

The difference between Cain and Abel, arising from the constitution of their minds and the habits of their lives, became still greater from other circumstances. In the exercise of religious instruction, the humiliating office would devolve on Adam of referring again and again to human apostacy. It is reasonable to suppose that there would be times in which he would relate to his offspring the heart-thrilling story of the

fall, and describe that act, in consequence of which he lost the moral lustre in which he had been created, and became subject to death—that act which infused a poison into our moral constitution, corrupting and destroying it from age to age—that act involving a catastrophe with which all nature sympathized.

We may conceive something of the grief shown in the countenance of our progenitor—of the trembling tones of his voice, and of his falling tears, as he thus recurred to the past; and of his face gathering brightness as he spoke of the promised Seed, as he dwelt on the conquests he should win, and as he marked the entire absorption of Abel in all he uttered, as if unwilling to lose a look—which so frequently gives meaning and force to what is uttered—or one word that fell from his lips. No such effect is likely to have been produced by the aspect of Cain; his countenance showed, probably, the wandering of his mind, and the cold insensibility of his heart.

That the revelation of a Saviour was accompanied by the institution of sacrifices, may be inferred from their use in the service of God. As he afterwards regulated with the utmost minuteness all the forms of religion, it is not probable that our first parents were left to devise a ritual of their own; nor is it likely that so important a rite as the offering of sacrifice was the fruit of human invention. Reason can perceive no connexion between the slaying of an animal and the averting of Divine wrath; and to put an innocent creature to death because we were doomed to die, and desirous to escape, might rather seem to be a new offence. There is no doubt, therefore, that our first parents were Divinely guided to this mode of at once acknowledging their guilt, and imploring the mercy of God, with a reference to the future substitution and atonement of the Seed of the woman.

But to the voice of parental instruction, and to that of ritual observances—alike declarative of personal guilt, and that He who was to come was the only basis of hope—Cain turned a deaf ear. He rejected the testimony which he ought to have received. He wilfully forgot that the religion of man as a sinner was totally different from that of man as an innocent creature, and that thenceforward worship could alone be acceptable as it was connected with a reception of the first promise, and an entire re-

liance on that Deliverer of whom every sacrifice exhibited a significant and impressive type. He surrendered himself to the power of unbelief. He was *the first sceptic* in the annals of our race.

"In process of time Cain brought of the fruit of the ground an offering to the Lord," but it was one of infidelity; and to this God had not respect. He rejected the offerer, and spurned the offering. But "by faith Abel offered unto God a more excellent sacrifice," that is, a greater sacrifice, or a fuller sacrifice; it was one of "the firstlings of his flock, and of the fat thereof," and being of a propitiatory kind, and presented in the faith of God's mercy, through the promised Redeemer, it was graciously accepted. The faith for which Abel is celebrated, implies that his sacrifice was founded on a Divine institution, accompanied with a promise of acceptance; and that it bore a typical relation to the Saviour, who, by dying, was to restore life and happiness to our guilty race. By this, "He being dead, yet speaketh," announcing to us the only foundation of acceptance with God, and urging us to exclaim, "None but Christ, none but Christ!" May He, who had respect to Abel and his offering, for the sake of his only-begotten, and well-beloved Son, extend the same favour to us!

W.

MOTIVES TO GRATITUDE.

THE miseries and troubles entailed upon the posterity of Adam are numerous. They are compared to the sparks that fly upward for number. It is a mercy we escape any of them—that all these sparks do not kindle upon us at once and together—that out of so many miseries we, individually, should have so few, when we are born to all, by descent; subject to all, by nature; deserving of all, by sin.—*Dr. B. Grosvenor.*

MUTUAL DEPENDENCE.

THE meanest man may be useful to the greatest, and the most eminent stand in need of the meanest: in a building the highest and lowest stones add to their own mutual stability.—*Saunderson.*



Strawberry, (*Fragaria vesca*), showing the runners on each side escaping from the old root.

ROOTS.

PLANTS, like animals, feed upon the food designed and furnished by Divine Providence for their nourishment; and with respect to plants, as has recently been proved by experiment, when they have digested the food taken up from the soil, they reject, similarly to animals, the portion thereof which is not appropriate to their wants, discharging a part of this excrementitious refuse into the air around them, in the form of gas and vapour, and another part into the earth in which they grow, in the form of slime. There is one obvious and very remarkable difference with respect to the feeding of plants and animals, necessary to be taken into account in all inquiries on the subject; namely, the circumstance that animals can travel about (even the sluggish oyster can shift its position on its native rock) in search of food, and when it becomes scanty or fails in one place, they can remove to another. Not so the plant, which is rooted in a particular spot, and cannot move, whatever may be the state of the supply of food, a supply which may and does fail in numerous instances. But this is not all; for, according to the well-established discovery just mentioned, the roots of the plant, by the tips of which it feeds, must, from its stationary position, remain amidst its own excrementitious rejections, which it very obviously cannot

appropriate as food—a circumstance that must doubtless tend to diminish its means of nourishment. Every plant then is placed so that it may, by the failure of the supply of food on the accumulation of rejections in the soil where it is rooted, be partially or completely starved.

It is a general maxim of human law, that for every wrong there is a remedy provided; and it is no less an invariable principle of Divine law, meaning thereby the laws which regulate the physical world, that for every want there is a supply provided by the great Creator:

His hand he openeth liberally,
And of His bounty gives,
Enough to satisfy the needs
Of every thing that lives.

Now it is the means which are provided for plants, to obviate the deficiency of food arising out of the circumstances just mentioned, that may, we think, furnish some very interesting facts and inferences, rarely adverted to in books on botany. These means are very different and various according to the species of the plants; some prominently obvious to the least attentive observer, and others recondite, and requiring the researches of the scientific to discover and bring them to light.

One of these obvious means may be observed in what are termed creeping plants, such as the strawberry and the

sweet violet. As soon as a root of any such plant is established, either from seed, or from an offset planted, or from a runner spontaneously fixing itself, it begins to feed on the plant-food in the soil, and at the same time, to fill the soil with excrementitious rejections; and consequently, while it exhausts the food on the one hand, it deteriorates it on the other. The whole plant seems to feel this, and as soon as it is felt, the means provided for obviating the disadvantageous circumstances come into operation. The root itself cannot remove of its own accord from the spot, but shoots immediately spring and go off in all directions around the root, in quest of fresh soil, at a distance from that which has been exhausted and contaminated by the original root; giving as plain an indication, as if it were written in words at length, that the mother-plant wishes to escape from the soil, and that the Creator has made an indispensable and admirable provision for the purpose. It strongly proves the correctness of this view of the matter, that the older the plants are, or, in other terms, the longer they have stood in the same spot of ground, the greater number of runners they will send off. Strawberries are usually said, in practical works on gardening, to be biennial, or rather triennial, in bearing fruit; but this is probably a mistake, arising from the rapidity with which they exhaust and contaminate the soil. On the contrary, the crown which bears fruit is most probably annual, and it is only the new crowns, formed by the side of this, that produce the second and the third year's crop of fruit; and, were not the soil exhausted and contaminated, would no doubt continue to bear from the accumulating crowns. It is remarkable, that not only the old plants send off runners, but even the young plants on the runners themselves begin, sometimes before they are rooted, to send off runners also, as if they could not otherwise escape far enough from the mother-plant; or as if, from the moment they caught root, they commenced exhausting and contaminating the soil so rapidly, as to render it indispensable to make an immediate escape.

Another instance of a well-known plant sending off numerous runners from the old roots, occurs in the violet; runners that root somewhat differently from those of the strawberry, though the instance is not brought forward here on

that account, but because practical gardeners have lately discovered it to be a great improvement in planting some species, to *wash the roots clean*, in preference to the usual mode of taking them up with balls of earth. Like the strawberry, the violet must, according to the principles just stated, be a rapid deteriorator of the soil, from the circumstance of its sending off runners to escape from it. When the roots, accordingly, are taken up with balls of earth, in order not to check the growth of the plants when transplanted, they must necessarily have around them the deteriorated soil, which the practical cultivator washes away, without being aware of the principle of deterioration. It is by no means improbable, that the same method of washing the old strawberry roots, and replanting them, instead of throwing them away, as is usually done, might prove equally successful with the washing of the roots of the violets; and that it might also be applied to other species of plants, which indicate rapid exhaustion and contamination of the soil by sending off runners.

On comparing the annual species of violets, such as heart's ease, which, not having runners, project their seeds to a distance by means of an admirable mechanism,—on comparing these, we say, with the perennial species, which diffuse themselves by creeping runners, nothing is more remarkable than the difference between them on shedding their ripe seeds. The creeping perennial violets being furnished by Providence in their offset runners with the means of escape from the deteriorated soil, they have not, in addition to this means, any mechanism for scattering their seeds to a distance. Their seed pod, indeed, has the same single loculent with three valves, but these valves do not collapse upon the ripe seed, in order to throw it to a distance, as, if they did, the distance would be necessarily small, from their not having, like the other, any mechanism for elevating the seed pod, which usually hangs near to, and very frequently touches the ground. Moreover, the first flowers of the creeping violets, so much admired for their fragrance, are rarely productive of seed at all, and it is only the flowers which are produced in summer, nearly without petals, and rarely seen or remarked, that are succeeded by seeds, perhaps, because in very hot dry weather, the whole plants, runners and all, being

very liable to wither up and perish, the seeds are only then providentially produced, that the species may not thereby be altogether lost.

But this doctrine, it may be said, applies only to the sorts of plants which thus send off runners, and not to other species that are greatly more numerous; and it is no doubt true, that creeping plants furnish the most striking facts illustrative of the principle; but those plants which do not creep like the strawberry and violet, are furnished by Providence with other means of partially escaping from spots of ground where they may have been too long established.

Let us take the instance furnished by the several sorts of trees, none of which can be said to creep in the same sense as herbaceous plants. When a tree, then, finds the soil deteriorated by exhaustion or contamination, so that the root fibres can no longer supply the demand of the leaves and young shoots for sap, it endeavours to escape from the place where it grows, not by self-removal, which is impossible, but by sending up from the roots suckers that may push their individual roots beyond the sphere of the exhausted and contaminated soil. In accordance with these views, it will be found, that no healthy young tree, whether it be a fruit or a forest tree, will push suckers so long as the soil it is planted in remains fresh, rich, and not deteriorated. But look at an old plum or pear tree in the orchard, or a decaying currant or rose bush, that has stood for several years in a border, or a lilac, or syringa (*Philadelphus coronaria*) in the shrubbery, and the suckers around them will strikingly show how ill they relish the old deteriorated soil in which they grow, and how many efforts they make to travel out of it. Practical cultivators have long been well aware of these facts, though not of all the causes; and nothing can more forcibly prove the great importance of annually digging in as much rich compost or fresh soil as possible around the roots of all trees and bushes to prevent their trying to escape, by sending off suckers. Were it possible, indeed, to renew the soil entirely, every two or three years, suckers, which are a sure indication of a deteriorated soil, might perhaps be entirely prevented, while the trees might thus be kept in very superior health and growth.

Some trees there are, that do not

send up suckers readily, and this chiefly occurs among the slow growing sorts, such as the mulberry, the walnut, and the oak, the soil being exhausted and contaminated much more slowly by these than it is by quick growing sorts; and hence it is that slow growing trees continue in healthy growth for so many years, annually extending their roots over a comparatively very limited space, while the great masses of leaves, which they shed every autumn, decay and form a rich natural top-dressing of the best description. Such trees, therefore, rarely send up suckers, inasmuch as they do not require to escape from the soil.

There is another circumstance connected with such trees, hitherto little investigated, though possessing very considerable interest; namely, the shedding of their small root-fibres, which die off like the leaves. It is difficult to show this indeed with regard to trees; but the fact is abundantly proved in the case of bulbous rooted plants, and other genera, which annually shed all their root fibres, as deciduous trees do their leaves, and in this way are enabled to modify the injurious effects of deteriorated soil. Accordingly, in the case of old bulbs left in the ground, though no new ones be formed, the fresh root fibres which push out at the season of growth, take, most probably, a different course from those of the preceding year, to say nothing of the resting of the ground, for several months, and the influence which rains must have in saturating it with fresh nutriment from above; while it may also tend, as it sinks, to carry down the excrementitious rejections deeper than the roots require to penetrate.

It would appear to arise from the same final cause, that trees and shrubs, which indicate an exhaustion and contamination of the soil, by sending up suckers from their roots, make little effort to diffuse themselves by seeds. When fruit trees, or flowering shrubs, therefore, (such as the plum, the lilac, and the rose,) are observed to send up many suckers, they either produce few flowers, or those flowers which they do produce, are rarely succeeded by mature seeds or fruits. On the contrary, slow growing trees, though very old, and even when not very healthy, frequently produce abundance of seeds or fruits, but not a single sucker; of which the oak and the hawthorn are examples, that few may not have remarked to be prolific bearers,

almost in proportion to their age, without ever sending up a single sucker.

An apparent exception to this occurs in the vine, which is very quick growing; but it is only apparent, not real. Some vines, on very open walls, will make young shoots in one season of two or three yards in length; but in proportion to the rapidity and extent of the growth of these summer shoots, the roots extend proportionally into new soil, and thus escape from the spot which they had deteriorated, without the necessity of pushing up suckers, which the vine never does. This, probably, is because it has other means of diffusion in the abundance of its fruit, generally in proportion to its age, or at least to the growth of the stem just above the ground; so, at least, it is maintained, from very ingenious illustrations by Mr. Clement Hoare, in his excellent work recently published. Besides, were a vine left to its natural growth, it would become diffused by the long branches falling down upon the ground, where, if accidentally covered with soil, they would catch root as readily as a bramble (*Rubus corylifolius*) is well known to do in similar circumstances.

The correctness of the principles here maintained, is corroborated in every particular by the practice of the best cultivators. For example, Mr. Rivers, of Sawbridgeworth, Hertfordshire, one of the most extensive growers of roses in England, says, in his catalogue, (1835,) that it is necessary to remove roses every three years from the spot they have occupied, in order to prevent their degenerating. From experience alone, indeed, without advertent to the principle of deterioration, Mr. Rivers finds that rose tree roots lose their smaller fibres by which they feed; and this, there can be little doubt, is because these small roots are starved by the exhaustion of the nutriment in the soil, or poisoned by excrementitious contamination. In the culture of the raspberry, similar removals, every three or four years, is indispensable to secure successful crops. This, indeed, was one of the plants first observed in this country to contaminate the soil, a circumstance indicated by the darker colour of the earth when the roots are dug up.

It would be easy, and it would afford many interesting details, to extend these illustrations of the preceding principles; but enough has perhaps been

said to warrant the following inference: namely, That plants in general will be found to deteriorate the soil in proportion to their natural, or more correctly, their providential facilities for establishing a new progeny at a distance from the deteriorated soil; and, consequently, that such facilities, or the want of them, furnish good indications to the cultivator, of the extent or rapidity of the deterioration caused by particular species.

J. R.

JOURNAL OF A TRAVELLER IN NORTH AMERICA, BEYOND THE ROCKY MOUNTAINS.

PREPARATIONS FOR ENEMIES.

September 12. Pursued our journey down the eastern branch of Salmon river, for five hours. The valley through which this river runs is generally fertile, and varies from one to three or four miles in width, but as we advanced toward the Salmon river mountains, the mountains upon each side increased in height and converged towards each other. They presented some noble prospects. It is a custom with Indians to send out numbers of their best hunters and warriors, in different directions, to see what they can discover; and especially when they are apprehensive any enemies may be near. We had evidence, from tracks recently made, that Indians of some other nation, or tribe, were about us; and therefore more than usual numbers of our men were flanking and ahead. On the banks of the river down which we were travelling, there was a dense growth of willows, extending, however, only a few rods into the bottom-lands. About two in the afternoon, we were all very much alarmed to see our men, who were out as hunters and guards upon the hills, running their horses at full speed, in an oblique direction towards us. Two of them were our principal chiefs. We knew that they had discovered something more than ordinary, but what, we could not conjecture. Being in a country where war parties of Blackfoot Indians often range, our thoughts were turned upon danger; and soon our fears were increased by seeing on the sides of the mountains at our left, clouds of dust arise, and in the obscure distance were seen men descending as swiftly as their horses could run. They were so far off

that we could not determine who they were. At the same time, our two chiefs on the hills halted and made signals, which we did not understand. In addition to this, some of the Indians said they saw Blackfeet Indians in the willows, not far off, between us and the chiefs; and our belief was confirmed that it was so, by two deer rushing from the willows towards us, and when they saw us, instead of returning, they only declined a little to the left, and passed before us. These inquiries arose in my mind: Why have the chiefs halted? Do they see enemies between us and themselves? Are their signals to give us warning of danger? What so frightened the deer that they rushed out towards us? We had all halted, and had made what preparation we could for battle. As we did not know in what part of the willows to make the attack, we were waiting for our enemies to commence the fire, and were expecting every instant to have their balls poured in upon us. It was a moment of awful suspense. We sent out a few men upon an eminence to our right, to see what they could discover, and they soon returned without having seen any enemies. Two chiefs upon the hill, who were now joined by those who rushed down the mountains, and who proved to be some of our own men, applied their whips to their horses, and in full speed came to us; and Charle, the first chief, rode up to me, and smiling, reached out his hand and said, "Cocoi, cocoi," (buffalo, buffalo.) Thus ended the battle; and the remainder of the day was spent in killing and dressing buffaloes, which was far more pleasant than fighting Blackfeet Indians. This made a desirable addition to their stock of provisions. We encamped in this place, which supplied us with plenty of good grass for our horses, and where there was no want of fuel.

DEVOTEDNESS.

Sabbath, 13. My health was no better, and my strength was failing. I felt that all was right, and that I needed this trial to lead me to an examination of my spiritual condition, my motives in engaging in this mission, and whether I could give up all for Christ to promote his kingdom in the world. I thought I could surrender all into the hands of God, my soul to my Redeemer, and my body to be buried by these Indians in this desert land. I felt as though it was

desirable to finish my tour, and return and make my report, and urge the sending of missionaries into this field, which is white to the harvest; and to the bosom of my family and friends; but still I would not have any will of my own, but say, The will of the Lord be done. These Indians persevere in their kindness, and are very respectful, and ready to obey as fast as I can impart to them instruction; and they say that what I tell them is different from any thing they have ever heard, being spiritual, and that they wish to have Sueapo (American) teachers. If the American churches will not send them teachers, criminality must rest upon them for disobedience to Christ's authority. Are there any heathen more anxious than these to be taught the way of salvation, and among whom there are so few hinderances to the introduction of the gospel? They have no idols, no sacrifices, no power of caste to combat, and as yet not the destructive influence which exists upon the frontiers.

MOUNTAINS.

For some distance on our way, on the 15th, the mountains came down near the Salmon river, rendering the valley through which it runs narrow. Some of these mountains terminate in high bluffs, which in many places exhibit uncommonly interesting strata. The lowest presented to view was white marly earth, about twenty feet in depth, nearly horizontal, and somewhat indurated; upon this was a green stratum of about four feet in thickness; next a stratum of brown of about ten feet; upon this a stratum of red, about the same depth of the green; over this a mould of decomposed lava. This marly earth slightly effervesces with acid. The rocks in most places are basalt—in some places very fine wacke. Noticing some unusual appearances in the condition of the earth near the foot of the mountains on the left, I rode to the place, and found a cluster of volcanic eruptions, which, though ancient, appeared more recent than any I have seen. A little way down the descent into the craters, I found a petrified stump, standing in its natural position; its roots and the grain of the wood entire. I think it was cedar, and about eighteen inches in diameter. This stood, undoubtedly, upon what was the natural surface of the earth, and the mound above and around was thrown up by volcanic fires. While time is

mouldering the lava into dust, the wind is scattering it over the country around, to renew the soil which was destroyed by the great conflagration, which once fused this whole region of the setting sun. This petrified stump, found in this position, proves that this country, which now is so destitute of wood, was once far better supplied, if not covered with forests. Does not this fact overthrow many of the theories of the formation of the great prairie of the west? From various sources of evidence, it is plain that these prairie regions were once far better supplied with wood than at present, and also that the present supply is constantly diminishing.

SCENE OF MOURNING.

Passed, to-day, a place which presented a very mournful scene, where two years ago, thirty Nez Perce young men, who were killed by the Blackfeet, were buried. They were all active young men, going out upon some expedition, the nature of which I could not learn. They had only gone a little way from the village which encamped here, when, passing through a very narrow defile on a small stream of water, walled up on both sides with perpendicular rocks, the Blackfeet Indians, who had waylaid them, attacked them from before and behind, and killed all but one, who mounted a horse belonging to the Blackfeet and pushed his way through the opposing enemy. After the Blackfeet Indians had retired from the place of slaughter, the Nez Percés brought away the dead bodies, and buried them in this place. According to their mode, they buried with them their clothes, blankets, and buffalo robes, in graves only about three feet deep, putting five or six bodies in a grave. Some time after this, the Blackfeet Indians came and dug them up, and made plunder of their blankets, and whatever they thought worth taking. The Nez Percés, some time afterward, came this way, and collected their bones, and buried them again. The graves in which they were first buried, were open when we passed, and fragments of garments were lying about. Here my Indians halted, and mourned in silence over their slaughtered sons and brothers. The whole scene was very affecting, and I could not but long for the time to come, when they shall settle down in a Christian community, and cease from their dangerous

wanderings; and also that the gospel may soon be sent to the Blackfeet Indians, and that they may imbibe its spirit of peace on earth and good-will toward men. After some time spent in reflections and solemn mourning, we left the place and proceeded down the river, and encamped near Bonneville's Fort, which he has abandoned, and which is situated in a small pleasant vale. This place would be favourable for our business, were it not that it is on ground where conflicting tribes often meet.

SALMON RIVER.

Salmon river is a beautiful transparent stream; its shores are covered with pebbles from primitive formation. In less than a mile from us, upon the mountain on our left, not far up the mountain is a location of mineral salt, which I saw; it is pure and crystallized. I saw some which the Indians procured, the quality of which is good. I was anxious to go and visit the spot, but was suffering too much from the inflammation in my head, and weakness which resulted from its continuance.

Took an observation of latitude, and found it to be $44^{\circ} 41'$. And after passing down the river two hours in a north-west direction, we entered into the mountains, leaving Salmon river on our left. And the river literally passed into the mountains; for the opening in the perpendicular rocks, two or three hundred feet high, and up these mountains several thousand feet high, was wide enough only for the river to find a passage. It flowed into the dark chasm, and we saw it no more. During the two hours' ride, before we entered the mountains, the scenery was grand. While there was some level bottom-land along the river, in every direction mountains were seen rising above mountains, and peaks above peaks, up to the regions of perpetual snow. These mountains are not so much in chains, as of a conical form, with bases in most instances in small proportion to their height. So much sublimity and grandeur, combined with so much variety, is rarely presented to view. The geology was much as in days past. Horizontal strata as yesterday, with interchanges of white, green, red, and brown; and in one place, for a mile in length, a vertical front was presented, facing the southwest, of one hundred and fifty and two hundred feet high, resting upon a base

of conglomerated rock; the stones of which are round, of primitive origin, cemented with marly clay, petrified, and of the various colours already mentioned. The opposite side of the river is studded with dark basalt.

After leaving the Salmon river, and going through some narrows on a small stream of water coming from the north-east, we came to a more open space, and to what I called the chimneys, standing near the base of a mountain. There were thirty or forty of them, appearing very much like stone chimneys of log houses, between ten and forty feet high. They are composed of conglomerated rock, of a somewhat slaty form, which makes them appear the more like the work of men. From this place we turned more westerly, and passed a high mountain, parts of which were very steep, and encamped in a valley by a stream of crystal water.

"I WILL SEE ABOUT IT."

THE same words have a very different meaning in the mouths of different persons. In my early childhood, on account of my poor dear mother's ill health, much of the domestic management of the family, and particularly the care of myself and two little sisters, was confided to a sort of upper servant, one Mrs. Harris. Having been in better circumstances, though now reduced to seek a situation in service, and having had a family of her own, she was strongly recommended to my parents, as a person who must needs possess a competent knowledge of household affairs, and especially must be skilful and experienced in the management of children.

Mrs. Harris was kind-hearted, and we were all fond of her; and yet, though much more indulged, we were not, altogether, half so comfortable as we had formerly been under the care of our own dear mother. This would, in some degree, arise from the nature of things. There is no absolute equivalent for the attention and kindness of a good mother: the very best substitute that can be obtained proves a very great disadvantage in comparison with her. But I do not think Mrs. Harris was as good a substitute as she might have been; and yet, when looking back to the days of her superintendence, I can hardly define her fault. It certainly was not want of integrity; for I am sure she would not inten-

tionally have wronged her employers of a farthing; indeed she rather erred on the opposite extreme, that of disregard to her own interests. It was not unkindness; not one of us ever felt the weight of her hand in chastisement, nor so much as received a harsh word from her lips, nor did she ever refuse to grant us any innocent gratification that we desired. It was not indolence; for she was always busy from morning till night. It was not want of cleanliness; for well do I remember our daily scrubbings and sousing in cold water, and our frequent change of apparel; and I remember, too, her own cleanly, comfortable appearance, especially in an afternoon, and on Sundays. To be sure, she was sometimes rather untidy in a morning, having, as she observed, been so driven with us children that she could not find time to set herself to rights; but by tea-time she generally contrived to be in what she called apple-pie order.

Well, as I said before, I cannot exactly define her fault, and yet we seemed to be always preparing to be comfortable, without ever attaining to it. I do think it must have arisen from her constant habit of satisfying herself, and endeavouring to satisfy others, with saying, "I will see about it;" which, in point of fact, though not of intention, amounted to much the same thing as dismissing the matter altogether.

"Mrs. Harris," said my little sister, who could but just speak, "I dot a sore thumb." "Oh! poor dear child!" replied Mrs. H., "there is a hang-nail wants cutting off: I have not got my scissors in my pocket, but I am going up stairs just directly, and I will see about it." Having satisfied the child with this promise, and a kiss on the sore place, she thought no more about it, until a few days after a large angry gathering had formed on the neglected part, which inflicted on the poor child severe pain, and the loss of her thumb-nail; and caused to the good-natured, but thoughtless nurse, the bitterness of self-reproach. By way of atonement, she immediately purchased a gaily-dressed doll and a sweet cake. These served to divert the child, but not to prevent or end her sufferings, any more than they tended to break the nurse of her foolish habit.

"If you please, Mrs. Harris," said the house-maid, "the rain has come in through the ceiling of your room, just over Miss Mary's bed." "Oh, indeed!"

was the reply; "I suppose something is amiss in the roof: I must see about speaking to master, and getting it mended;" and thus the matter was dismissed from her mind. Not long afterwards the family was alarmed in the dead of the night, by little Mary being suddenly seized with the croup, occasioned, as was clearly proved, by her bed having become damp, in consequence of the above-mentioned neglect. Poor Harris was so heart-broken at the unhappy circumstance, that my parents forbore to add their reproaches to those of her own conscience, kindly hoping that such a lesson would not be forgotten. Contrary to all expectation, the child recovered, but the nurse soon relapsed.

The next palpable instance of mischief resulting from Mrs. Harris's old quietus, though in itself very vexatious, was trivial, compared with those I have already mentioned. A large quantity of pickles and preserves had been made, for the winter use of the family, which, after remaining a day or two, required to be tied down. This was Mrs. Harris's business to perform, or at least to attend to its performance; nor was any other person likely to remind her of its omission, as she alone had access to the store-room. For several days, as often as she had occasion to go into the store-room, or even as she passed by the door, she would exclaim, "Oh dear! there are those preserves! I must see about tying them down." But the repetition of this hack-nied phrase seemed gradually to wear away the impression that something was to be done; new stores came in to occupy the front of the shelves, the jars were pushed backward; and, in a little time, glided into the condition of "out of sight and out of mind." They were not again thought of for several months,—not, indeed, until some of them were required for use; and then they were hunted out, and found mouldy, sour, and good for nothing.

On looking back to this habit of our nurse, I think it was injurious not merely in its immediate effects, but also in its influence on the tempers and habits of the children. If, as was often the case, I asked for a bit of string to spin my top, or a little paste when making a kite, I was put off with an empty promise to "see about it," until the time was past in which I should have enjoyed my amusement, or performed my little undertaking. I am sure that my temper

was irritated by it; and that such conduct tended to make me dilatory in my habits, and also to weaken my sense of the sacredness of a promise. And when, as my master directed me, on my first going to school, I took my book to Harris, and requested her to hear my spelling lesson, she gave me her usual answer, "I'll see about it," or, "I'll see about it presently;" I drew hence an excuse for my own idleness, laid aside the book, omitted to get the lesson, and next morning was disgraced in school; and, what was worse still, failed to acquire habits of application and perseverance, and a just sense of the value of improvement. I could easily enumerate twenty more instances; but it is not necessary or desirable, especially as I do not intend to confine myself to a portraiture of the character of Mrs. Harris, or its influence on my own.

Holiday time came, and I went to visit my Uncle Barnaby. I believe it was the first time I ever went from home alone; and though I had been taught to think very highly of my uncle, I did not know much of him from personal observation. Cousin Frank was there. He was telling me what a grand display of fire-works they had at his school a few weeks before, and offered to instruct me in the art and mystery of preparing squibs and crackers, sky-rockets, and catharine-wheels. I was delighted with the proposal; and, by his desire, hastened to the housekeeper to obtain some brimstone, saltpetre, charcoal, and paper. "I am afraid, sir," replied the housekeeper, "that you want these things for some dangerous scheme; however, I'll see about it, and, if master thinks proper, you shall have them." "There's an end of that, then," thought I to myself, taking it for granted that the words had no more meaning from the lips of Mrs. Rogers than from those of Mrs. Harris. I went away disappointed, and perhaps a little sulky. "Frank," said I, "we can't have the things." "Never mind," replied Frank; "come with me; we'll have a slide on the lake: it is completely frozen over." Away we ran, in high glee; but before we reached the new object of our wishes, we heard Uncle Barnaby's voice from his study window—"Boys! boys! don't go on the ice till I have time to see about it; I am engaged just now, but I shall be with you shortly." "Another disappointment," thought I: "it is not all pleasure abroad any more than at home."

Frank did not appear at all disconcerted; he knew uncle better than I did. "Come," said he, "let's have a game at cricket the while." "The while of what?" I inquired, rather pettishly. "The while that uncle finishes what he is about, and sees whether he thinks it safe for us to go on the ice." "Do you think then that he will see about it?" "To be sure I do; did he not say he would?" "Yes; but that is only a put-off, is it not?" "Not with Uncle Barnaby: he always means what he says. Let me tell you, he would think it a sin to say he would see about any thing, and then neglect to do so. I have often seen him make a memorandum, lest he should forget even the smallest thing that he engaged to do. There were two things that he promised to see about: that was yesterday, before you came; and I should not wonder a bit if he is attending to one of them now." "Then," thought I, "that is the way to be trusted; and if Uncle Barnaby really does see about what he says he will, I shall be quite satisfied with what he says."

No very long time elapsed before my uncle came to us:—"Now, boys," said he, "am I under any engagements with you?" "No absolute promises, sir," replied Frank; "but there are several things you promised to see about." "Yes, sir," I ventured to interpose, "you promised to see whether we might go on the ice." "I have seen about it, my little man," returned my uncle, kindly patting my head, "and I wish you not to go on the lake to-day: the ice is not sufficiently firm to bear you without danger. If you like to amuse yourselves on the duck-pond you may safely do it; and, as the frost is likely to continue, by to-morrow I should think you may venture on the lake. Well, what next?" "About the Shetland pony, uncle," said Frank,—"why there he certainly is! Have you decided on purchasing him, uncle?"—"Yes, Frank, I have this morning concluded a bargain with Farmer Stokes, who assures me that he is quite manageable, and free from vice. The farmer is an honest man, and one on whose word I can rely, so I have no hesitation in giving you full permission to mount Bucephalus, and I hope he will afford you much pleasure. I need not say, you will permit your cousin to share your recreation."—"Certainly, uncle. Cousin Sam shall have the first ride.

I thank you a thousand times for your kindness."—"You are heartily welcome, my boy. But come, let's make clear scores before we part: were there any other promises?"—"Only about the lecturer, sir, and his philosophical experiments."—"Well, Frank, Mr. — has just been with me. I find him a very sensible, well-informed, and modest man, and think that his lectures will be both interesting and instructive; we have, therefore, arranged for him to spend a few days with us, as soon as his public engagement is over. He will lecture in the library, on Monday and Tuesday evenings. In the mean time, you may ride round, and invite any of your young friends within reach to join our party." "Oh, thank you, uncle, thank you! I am uncommonly obliged to you: how much you strive to give us pleasure! There is one thing, sir, I really am vexed with myself for having proposed to Cousin Jem, because I am afraid you will not approve of it—I spoke to him about making some fire-works."—"Ay, true; Rogers has been telling me about it. She is frightened to death, she says, lest, as the old ditty has it, we should be all blown up alive. I must own, I am not over fond of gunpowder; first, because it is a dangerous plaything; and next, because it is employed for the purposes of war, and otherwise taking away human life. The principles of peace are so very dear to me, that I dislike even a plaything that might possibly foster the passion for war. Apart from these considerations, I could enjoy a display of well-constructed fire-works as well as either of you. I fancy some of the experiments of our philosopher may throw an interesting light on the nature and properties of the several ingredients, the combination of which forms gunpowder. Perhaps you will find enough to occupy the intervening time, and will consent that the gunpowder experiment should stand over." I need hardly say, that we both cheerfully consented to postpone or surrender our project, when thus dealt with on the terms of reason and principle; and when so much compensative kindness was manifested in connexion with prohibition or hesitation as to an improper or a questionable indulgence.

The pony afforded us ample entertainment for that day. We traversed many miles of the adjacent country, in the old Yorkshire method of "ride and

tie,"* calling, on our way, on several acquaintances of Frank's, to engage their company for the following week, and to discuss with them the properties and merits of the pony. The evening was happily occupied in cheerful, yet instructive conversation with Uncle Barnaby; in looking over some valuable works on natural history; and in complying with the wishes of our respective parents, by writing to inform them of our safe arrival at our uncle's.

Next morning, at the breakfast-table, almost before we had had time to form a wish or a thought about the sliding, uncle convinced us that he had not lost sight of his engagement. "Well, lads," said he, "I am glad to see so fine a morning. As soon as you have finished your meal, we will equip ourselves, and go out for an hour's skating. The ice is quite firm; and though the air is cold, we shall be able to keep ourselves warm by exercise." Kind-hearted man! he had taken the trouble to procure for each of us a pair of scates to fit our size, a pair of woollen gloves, and a stock, or, as it is called, in modern language, a comforter. Thus suitably equipped, we sallied forth, and, to our great surprise, as well as gratification, our kind uncle accompanied us, and not merely discovered the vigilance of a cautious guardian, but joined in our sport with all the skill, dexterity, and agility of an accomplished scater. "Who would have thought," said I to Frank, "that such a steady, elderly gentleman as Uncle Barnaby would jump about like a boy, and laugh at a tumble, just as we do?"—"Ah," replied Frank, "you will know uncle better by-and-by; and you will always find, that he first considers whether a thing is right and proper; then, if he decides to do it at all, he goes into it with all his energy, and leaves off just at the right time."

Sure enough, just as Frank had said, after joining heartily in our sport, and teaching us many entertaining movements, uncle looked at his watch, and immediately took off his scates, saying, "My lads, I have spent as much time

in play as I can afford; I must go in, and attend to some business. You may amuse yourselves for another hour, if you like; but come in in good time to prepare yourselves for dinner."

We pursued our sport with much glee, and without any sense of fatigue; but just half an hour before dinner-time—such is the influence of example—Frank observed to me that it was time for us to go in; "For," said he, "uncle will expect us to be punctual." I know some men who scorn the idea of punctuality in little things, and reckon it petty and enslaving, fit only for old maiden ladies, who, they say, have nothing else to think about. This I am sure of, both in Uncle Barnaby and Cousin Frank, punctuality in little things never detracted a grain from manliness and nobleness of character. On the contrary, it gained them a higher degree of respect and good will from all around them, and left them at liberty to attend to and execute great things, which the careless and procrastinating never accomplish.

Air and exercise had gained us a good appetite for our meal; after which, though we had felt no weariness while actively engaged, we found no inclination to controvert Uncle Barnaby's remark, that we might as well employ ourselves in-doors the remainder of the day. He proposed that we should assist him in making a plan for the erection of a school-house. It was a project, he said, on which his mind and heart had long been occupied; but the time had never arrived in which he could obtain such co-operation as would justify him in setting about it. Since he left us on the ice, he had held a meeting on the subject with a few neighbours; the thing was decided on, the ground selected, and the execution of the business was committed to his superintending care. My uncle had collected several plans; the merits and disadvantages of each were discussed, as well as its adaptation to the spot in question.

The selection being made, Frank, who was a good draughtsman, prepared a plan for the occasion, while uncle digested the rules of the proposed institution, and wrote to a friend of his to be on the lookout for a suitable master and mistress. Frank told me, that after the thing was once decided on, nothing could have induced uncle to sleep a night without taking measures for its actual accomplishment. Next morning the carpenter

* In case the reader should not be familiar with this phrase, the plan alluded to is a contrivance by which two persons avail themselves of the services of one animal, without riding double. One of the travellers starts on foot, the other on horseback; at an appointed spot the rider dismounts, ties up the horse, and proceeds on foot. The other comes up, mounts, and takes his turn for a ride; and thus the whole distance is divided.

and mason received their instructions; and several poor people, whom the frost had thrown out of their regular employ, were immediately set to work in clearing the foundation, and collecting materials for the intended building. “This,” thought I, “is seeing about a thing in right earnest.” Before the holidays were over, considerable progress was made in the building; and long before we again visited my uncle at Midsummer, a good school was collected, a master and mistress comfortably settled, and a course of instruction going on that proved a great blessing to the rising generation. But I must cut short my remarks. What with seating and riding, and inspecting the progress of the school, and attending the lectures and experiments of the philosopher, and receiving the visits of our young friends, and the standing pleasures of the library and of Uncle Barnaby’s fire-side conversations, the holidays glided away most happily. I do not recollect, during the whole month, one five minutes of idleness or ennui. This is more than can be said for the school vacations of many young people. Oh! I wish they had an Uncle Barnaby, or some such friend, to teach them by example the true secret of being always happy by being always usefully and benevolently employed.

Before my return home, however, I received a great shock, in hearing of the alarming illness, and a few days after, of the death of our kind, but dilatory nurse, Mrs. Harris. She had complained of a severe cold and of being otherwise indisposed, and had been repeatedly entreated, by the other servants, to use some simple domestic measures for obtaining relief. Every morning she was asked whether she had taken any medicine, or used the means suggested. The reply on each occasion was, “No; but I will see about doing something to-night.” But while she was delaying, disease was rapidly gaining ground on her frame; and, when a medical man was called in, he immediately expressed his apprehensions as to the result. These apprehensions were fatally confirmed; and, as my dear father observed, in his letter to my uncle, “Thus this poor woman has fallen a martyr to *seeing about* her duty, instead of *setting about* it.”

This remark took a strong hold on my mind; and, when my first feelings of agitation and grief had somewhat subsided, I asked my uncle to tell cousin Frank and

me exactly what he meant by the phrase, “I’ll see about it.” “I am sure, uncle,” said I, “you mean something very different from what poor Mrs. Harris did, if she had any meaning at all; and yet you do not always set about a thing directly you have said you will see about it.”—“Well,” replied my uncle, “I think the phrase, when properly used, serves as a caveat both against rashness and delay. ‘I will see about it;’ that is, I will begin nothing without due consideration, whether I can do it, whether I ought to do it, whether I had better do it, and what means I shall employ for doing it. The result of this examination sometimes is that of leading me to see that the thing had better be let alone. This can be done directly, and no more time, thought, or feeling wasted upon it. For want of such consideration, many enterprises unduly begun are soon broken off in disappointment. But, on the other hand, having thus satisfied myself that the thing in question is lawful, desirable, and practicable, and having arranged the means by which it is to be effected, when I say I will see about it, I bind myself to employ my attention and energies in accomplishing, with the least possible delay, the matter I have undertaken; and this, as far as I can judge from experience, is the only way of bringing things to a satisfactory conclusion, and being at liberty to set about something new. I know two persons who are now in a state of confirmed derangement, the consequence of their own lamentable habit of delaying to set about that which they knew ought to be done. The one is a tradesman, who, though conscious that his affairs ought to be looked into and set to rights, yet suffered them to go neglected, until ruin was inevitable; and then the poverty and misery he had inflicted on his wife and children so overwhelmed his spirits that his rational powers gave way. The other is a lady, who lost her only child by the small-pox, after having said, from month to month, that it was high time to see about having him vaccinated. I am acquainted, also, with an amiable couple, on whom, before their marriage, I pressed the duty of maintaining family prayer. I endeavoured to obtain from them a promise to begin on the very night when they first took possession of their habitation as heads of a family; but I could gain no more than, ‘We will see about it.’ Many times have I visited them, and scarcely ever without hearing

an expression of regret and remorse at the continued omission of what they fully perceive to be a duty, and a repetition of the vague intimation, 'But I hope it will not always be so: we must see about it.' I know many persons—and I hope that neither of you, my dear boys, will add to the number—who never for a moment attempt to deny or doubt the infinite importance of the soul's salvation, and the imperative necessity of seeking and striving to secure it, who, nevertheless, content themselves from day to day, and from year to year, with languid resolutions to see about it, while they never set about it in right earnest, and thus, probably, they will continue to procrastinate till they are convinced of their folly by their ruin.

"The phrase, then, of which you have asked me the meaning, in its best and proper sense, signifies consideration and action; but, in its worst and common acceptance, it is only another name for procrastination and neglect." C.

MORAL POWER OF YOUNG MEN.—No. I.

1 John ii. 13, 14.

THE inspired writer addresses an appropriate word of instruction and encouragement to every age. The children, he reminds of the tender and forgiving love of God; the fathers, of their mature experience and knowledge; the young men, of their moral power.

I shall therefore now attempt to show you, my young friends, the good which it is in your power to do, and how you may do it. It is very important that you should know what is meant by the "luxury of doing good."

The first and most indispensable step towards doing good in the highest moral sense, is to give yourselves up to God, to choose him for your supreme guardian and portion, to prefer his favour before all other things, to identify your interests and hopes with his kingdom, to commit your personal salvation entirely to the Saviour, and to make it your ruling object and ultimate end in life, to "glorify God and enjoy him for ever," in conferring both temporal and everlasting benefits upon his creatures. This is what is commonly called conversion. It is that moral change which the mind undergoes when it becomes reconciled to God, and devoted to the Divine government through the power of the Holy Spirit.

Let me then proceed to show the good

which in such a state, you may confer upon your fellow-beings.

1. Your parents.

It was evidently the wise intention of the Creator, that the moral influences of virtue and religion should flow very much in the channel of the social and domestic affections. Of these, the paternal and filial are the first and strongest. The influence of a son upon his parents, is in some respects greater than that of parents upon their son; for parental affection is usually stronger than filial. It may not be more excitable and ardent; but it is a deeper, more constant, more tenacious affection. A cause adequate to detach the heart of a son from his parents and send him forth an exile from their dwelling, is by no means sufficient to detach their hearts from him. No. The mother's heart still follows her son with unutterable longings, and a father's compassions still yearn towards him; yea, although he may have suffered greatly from the conduct of his prodigal son, although he has wasted his substance in riotous living, has forged notes against him, has tarnished his honour, has even conspired with his foes against his life—yet let a fatal disaster befall him, and the father instantly cries aloud with agony of spirit, "O my son Absalom! my son, my son Absalom! Would God I had died for thee, O Absalom, my son, my son!"

Such is a parent's love; and hence scarcely any other moral cause on earth strikes so deeply and powerfully upon his heart, as the conversion of a son. I have seen an aged father, whose head was whitened with the frosts of sixty-five winters, and whose heart was exceedingly cold and hard in sin, melted and subdued by his son's repentance—a son converted to religion in the city, and returning to his home in the country, to tell his parents what the Lord had done for his soul.

Of the few instances in which men become pious in advanced life, very many of them are effected through the direct or indirect influence of their children, who have found the pearl of price abroad, and brought it home to their parents.

A little daughter, whose parents were "Universalists," and unfriendly to evangelical religion, providentially attended a religious meeting, and became interested. The father was displeased. She was desirous of attending the meeting again, but he forbade her. She waited anxiously for the next, and renewed her

request. Again she was forbidden. She begged with tears. Excited by that hostility to religion which sometimes overcomes parental love, and renders the parent "without natural affection," the father said to her, "If you ever go to that meeting again, I will turn you out of doors." The daughter, moved with that peculiar emotion in which the soul is at once overwhelmed and aroused to unwonted energy, lifted a meek, glistening eye to her parent, and replied, "When my father and mother forsake me, then the Lord will take me up." The declaration went to the father's heart—it was irresistible. Parental affection was awakened; a conviction of his unnatural conduct rushed upon him, and with a full bursting heart he replied, "Go, my daughter; I will never throw another straw in the way of your religion." The consequence was that the parents soon followed their daughter. Thus did this child become an angel of light and salvation to her parents.

A young man once said to me, "I wish I was a Christian, that I might do some good to my parents. Neither of them is pious. They are becoming advanced in life; they cannot long survive. They do not enjoy a faithful ministry, and since I left home, I have thought more of them than I ever did before." This was noble. It was through this channel of filial affection, that grace first moved to turn his heart to God. He soon became a decided Christian. His influence upon his parents has been blessed to them, and they have since become pious.

Reader, think of your parents. Their steps are declining towards the grave. What you do, either for their present happiness or their eternal good, must be done quickly. If they are not pious, let them have the needed influence of your piety as an instrument to save them; if they are pious, let their desires be granted, and let them rejoice over you before they die. Suppose that your irreligious parent should die while you are deferring duty, and that you should afterwards become pious; would not your present neglect occasion you bitter reflections as long as you live? Awake then every sentiment of filial love, and go forth speedily to bless with a Christian influence the father who begat you, and the mother who bore your infancy upon her arms.

Do all that is in your power also, to

render their earthly existence comfortable and happy. If they are aged and infirm, visit them as often as you can; carry them tokens of your love, and show them that you feel a tender interest in their happiness. If they are poor, contrive if possible to enclose some money occasionally in your letters to them. If your income is small, you can perhaps save it from your clothing, or other incidental expenses. Whenever you are prompted to spend money needlessly, think how much good it would do your parents.

As long as your parents live, observe the same affectionate, filial, respectful, devoted homage towards them, though of a more dignified and elevated form, which you felt when they were protecting your helpless childhood and toiling for your support. In a single word, be all that to your parents, which you will wish your children to be to you.

2. You may exert a very salutary influence upon your sisters and the younger members of your family; also upon female society at large.

Sisters may do much towards restraining their brothers from vice, but brothers may do still more for their sisters; for sisters generally love their brothers with more ardour and tenderness of affection, than brothers exercise towards their sisters. They also look up to their brothers, respect their opinions, enjoy their protection, seek their society, imbibe their views, follow their example. Hence brothers are in a great degree responsible for the character of their sisters, and also, for the same reason, for that of the younger members of their family.

Make it your first object to impress on your sisters the importance of religion. However beautiful and accomplished, unless they are pious, they lack the essential ornament and glory of their sex. You can hardly be faithful to them in vain. It is very rare that a good brother puts forth kind, judicious, persevering efforts to bring his sisters to the knowledge and love of the Saviour, which are not crowned with success.

Always treat them with affectionate respect. Every young man ought to feel that his honour is involved in the character and dignity of his sisters. There is no insult which he should sooner rebuke than one offered to them. But if you would have others esteem and honour them, you must esteem and honour them yourself. Treat them with far less

reserve, but with no less delicacy, than you would the most genteel stranger. Nothing in a family strikes the eye of a visitor with more delight, than to see brothers conduct themselves towards their sisters with kindness, civility, attention, and love. On the contrary, nothing is more offensive or opposed to the honour of a family, than that coarse, rude, unkind manner which brothers sometimes exhibit.

Beware how you speak of your sisters. Even gold is tarnished by much handling. If you speak in their praise—of their beauty, learning, manners, wit, or attentions—you will subject them to taunt and ridicule; if you say any thing against them, you will bring reproach upon yourself and them too. If you have occasion to speak of them, do it with modesty and with few words. Let others do all the praising, and then you may enjoy it. I hope you will always have reason to think very highly of your sisters.

If you are separated from them, maintain with them a correspondence. This will do yourself good, as well as them. Do not neglect this duty, nor grow remiss in it. Give your friendly advice, and seek theirs in return. As they mingle intimately with their sex, they can enlighten your mind respecting many particulars relating to female character, important for you to know; and on the other hand, you have the same opportunity to do them a similar service. However long or widely separated from them, keep up your fraternal affection and intercourse. It is ominous of evil when a young man forgets his sisters.

If you are living at home with them, you may do them a thousand little services which will cost you nothing but pleasure, and which will greatly add to theirs. If they wish to go out of an evening—to a religious meeting, or on a visit, or for any other desirable object—always be happy, if possible, to wait upon them. Consider their situation, and think how you would wish them to treat you, if the case were reversed.

I like the plan also of giving and receiving presents between the members of a family, and hope you too will always like it so well, as frequently to offer some pleasing tokens of fraternal affection to your sisters. Nor need you fear that all the love, kindness, and respect which you tender to them, will not be abundantly reciprocated.

These directions respecting your con-

duct towards your sisters, will apply generally to your conduct towards all the younger members of your family.

You may also exert a powerful and happy influence upon your other female acquaintances. Let the young men of any place give their example to virtue and piety, and their connexions of the other sex will seldom fail to follow them. The strong fortress of the adversary will thus frequently be taken, vice will hide herself in a dark corner, and society will rise to intelligence, virtue, and religion. Wherever the “young men have overcome the wicked one,” and “the word of God abideth” in them, and they put forth their strength on the side of religion, it is a day of assured triumph to all that is good.

3. You can do great good in Sabbath Schools.

These have become important moral nurseries. The character and direction of coming generations are to be determined in a great measure, by these institutions. “Son, go work to-day in my vineyard.” It is yours to assist in moulding these young minds for present usefulness, and everlasting glory. The obligation is upon you; nor can you throw it off, or innocently reject it. You must put your hand to this work, and help forward the redemption of the world, or lie down under the sluggard’s rebuke. Every young man ought, if possible, to be a teacher in a Sabbath School.

But how are you to do your duty to these scholars, unless *you* are pious? How will you realize the worth of their souls, unless you have felt the worth of your own? How can you speak of the Saviour’s love with that sincerity which moves the heart, unless your own heart has felt it? How can you pray for them, without the spirit of supplication at the throne of grace? I do not say that you ought not to be a teacher in the Sabbath school, unless you are a Christian; but it is certain that you ought to be a Christian, in order to do your duty faithfully as a teacher.

Now here is an opportunity for you to bring your mind into immediate contact with a class of children and youth, in the most interesting and important period of their lives; to impart to them the most valuable of all knowledge; to give to them their first and deepest impressions of Divine truth; to mould their hearts and form their characters for eternity; to become as it were their spiritual father;

to place them as jewels in the crown of your rejoicing, there to shine when all the wealth and splendour of the world shall have vanished away. If you can become instrumental of moral good to one pupil, that individual may do good to others, and they again to others; thus will the blessing go on accumulating till the end of time, to be your exceeding great reward in the final day. Will you then suffer such a privilege to pass unimproved?

In order to render the duty pleasant and profitable to yourself, as well as beneficial to your scholars, observe the following rules.

First. Rise as early on Sabbath mornings, as on others.

Second. Have the lesson to be taught previously well studied and thought upon. Gather all the important instruction into it from your reading and experience which you can collect. Do not expect to interest others in what your own mind is not interested, nor to teach them what you do not know yourself.

Third. Consider well the material on which you operate. It is intelligent. Nothing therefore but intellect, illumined with truth, and kindling with thought, is an appropriate and effectual instrument to act upon it. It is moral. It requires a heart of keen and pure sensibilities, and alive to moral discriminations. It is immortal! Does the sculptor endeavour to do his best, when he works upon the finest and most enduring marble, to form a monument of his skill that will long perpetuate his name upon earth? How then ought you to do, when operating upon one who will live for ever!

Fourth. Love your pupils. Love them not only or chiefly as pleasant children, but as moral beings, and as what they are in prospect. Love them as sinners needing a Saviour. Love them as the future strength and glory of the nation. Love them as the agents called to bear forward to its consummation the Divine purpose of redeeming mercy, in the most important and decisive age the world has ever seen. Love them as those who may strike with you the golden harps of heaven, by the side of Gabriel.

Fifth. "Be not weary in well doing," nor expect too much in a day. "In due time you shall reap, if you faint not." Statuaries have sometimes laboured patiently, for five or ten years, upon a single block of marble, to make it seem to breathe and speak for a few centuries. And can

you not labour as long and patiently upon an immortal mind in the hope of enkindling it with the life of heaven, and causing it to speak with angelic voices, the praises of God for ever?

Sixth. Seek for the immediate conversion of your scholars. Endeavour to lead them directly to "the Lamb of God, which taketh away the sin of the world;" to him who has said, "Suffer little children to come unto me, and forbid them not, for of such is the kingdom of heaven." Consider how many children die. Are your scholars prepared for that event? Many teachers have witnesses of their fidelity, monuments of their faith and love, already with the shining ones in heaven.

Seventh. Visit your scholars at their homes. This will awaken or increase parental interest in their behalf; it will also give you access to the hearts of irreligious parents, by which you may become instrumental to their salvation. It will moreover serve to secure the punctual and uniform attendance of your scholars upon your instructions.

Eighth. Be faithful and constant in your attendance at the school, and also at the teachers' meeting. Let no slight excuse ever detain you. Your absence once, will be an apology for the absence of your pupil many times; your cheering presence at the teachers' meeting will always encourage, your absence will always tend to discourage the whole company of teachers with which you are associated.

Ninth. Pray for your scholars. Commit them often and fervently to God. Remember your entire dependence upon his grace for any fruit of your labours. Consider the promises; believe them; take hold of them; be filled with the faith and power of the gospel.

If you will thus go forth to the duties of this moral vineyard, success will not be wanting, your reward cannot fail. "He that goeth forth and weepeth, bearing precious seed, shall doubtless come again rejoicing, bringing his sheaves with him."

4. You can render essential service to your minister.

Suppose that he sees little or no fruit of his labours. Suppose that, after labouring to the utmost of his ability, to convince of truth and duty those for whom he toils and prays, he is compelled to take up the lamentation, "Who hath believed our report? and to whom is the

arm of the Lord revealed?"—"All day long I have stretched forth my hands unto a disobedient and gainsaying people." Suppose that the leaden slumbers of sin have fallen so heavily upon his people that all his admonitions, and counsels, and prayers, fail to rouse them from their sleep of death; but one goes to his farm, and another to his merchandise, and another to his pleasures, while the pastor goes alone to weep and tell his sorrows to God.

"With great heaviness and continual sorrow of heart," he exclaims, "I have laboured in vain, I have spent my strength for nought and in vain; yet surely my judgment is with the Lord, and my work with my God." If his conscience is clear, so far as he is concerned, he has, like the prophet, nothing to regret. But for his people, his heart is disconsolate. He can hardly avoid reflecting, whether right or wrong, 'Would not some other person do more good in my situation than I can? Have I not mistaken my calling or my place? Am I not throwing my strength and my life away?' And then how natural to slide over still farther into the painful presumption, that he could have been more useful to the world, to have pursued his original intentions or employments, and thus secured those other means for doing good which he has sacrificed.

There are times when almost every pastor who labours without success, will be afflicted with such feelings as these; they are almost unavoidable, so long as human nature retains its frailties. And can you tell, young man, how much you may help to produce or to remove them? Scarcely any person living can do more. If the young men of a town, or a parish, or a society, show an affectionate interest in their pastor and in the success of his labours; if they gather around him; if they stand by him in his attempts to do good; and especially if they join themselves to the Saviour, and thus give to religion the influence of their personal example, they can increase his moral power and usefulness an hundred-fold, and enable him to say with emphatic truth, "Thou hast put gladness in my heart more than in the time that their corn and their wine increased." They may thus become "co-workers together" with him in the best of all service.

Young man, love your pastor. Let him see and feel that he has your sympathy and your countenance in his

labours. Look to him with confidence; feel assured that he is your friend, and ardently desires your best interest. Consult his usefulness; do all you can to increase it; do nothing to oppose it. All that you thus from benevolent motives add to his usefulness, will be set to your account. For if "the King shall answer and say unto them, Verily I say unto you, Inasmuch as ye have done it unto one of the least of these my brethren, ye have done it unto me"—"Come, ye blessed of my Father, inherit the kingdom prepared for you from the foundation of the world,"—if he will say this to those who have shown kindness towards the least of his disciples, surely he will not leave those unrewarded who have given their sympathy and their influence to his ministering servants, to aid them in advancing his kingdom.

Perhaps you think your pastor feels above you. It is not so. Whatever be his rank and standing, every faithful minister of Christ will cheerfully say with Paul, "Though I be free from all men, yet have I made myself servant unto all, that I might gain the more." I do not think you need ever to fear that you shall make yourself too familiar with your pastor, or presume too much upon his friendship, provided you treat him with that respect which your own good sense will dictate. And be assured, that if you alienate yourself from him; oppose his usefulness; speak of him in terms of slander and disrespect; it will be visited with unwelcome retributions upon your head, even in the present life. An intelligent and virtuous community will lose confidence in your character, public sentiment will condemn you, your feet will be taken in the snares which your own hands have laid. Next to the guilt and penalty of disobedience to parents, is that of disrespectful or improper conduct towards our moral guardians and teachers.—*Hubbard Winslow.*

EVIL HABITS.

LICENTIOUS habits in youth give a cast or turn to old age. The mind of a young creature cannot remain empty; if you do not put into it that which is good, it will gather elsewhere that which is evil.—*Berkeley.*

SELF-WILL.

SELF-WILL is so ardent and active, that it will break a world to pieces to make a stool to sit on.—*Cecil.*

THE PULLEY.

THE great object of a machine as employed in assisting animal power, in raising and supporting weights, is, to proportion the velocity of the power and of the weight; that is to say, the part of the machine to which the weight is attached must move as much slower than that part to which the power is applied, as the weight exceeds the power. This statement the reader may easily understand by a reference to the lever, a machine already explained.* In the use of the lever, we gain power by increasing the distance of the power from the fulcrum, and decreasing the distance of the weight, and consequently the velocity.

The lever is one of the most simple and beautiful of all machines; but there are instances in which it cannot be employed for raising weights. If it should be required to raise goods from the hold of a vessel to a wharf or warehouse above, the lever would be evidently unsuited for the purpose, and we must resort to either the wheel and axle, or the pulley.

In the construction of the lever and the wheel and axle, it is necessary that the materials of which they are formed should possess the property of inflexibility. If, for instance, a weight applied to one end of a lever cannot be raised with a certain available power without causing the weight to bend over the fulcrum, all its value will be lost. Without the property of inflexibility, the lever is absolutely useless. But it is otherwise with the instrument we are now to explain; for its efficacy depends upon the perfect flexibility of the materials; and the entire theory of its action must be considered in reference to the possession of this property.

A pulley, in the common acceptation of the word, is a block of wood suspended on a pivot so as to be capable of rotation, and having, in its thickness, a groove that will admit a cord or rope. It is not, however, to the form of the wooden block that we must look for an explanation of the theory of mechanical advantage; for in its construction we have to be chiefly careful that there shall be no friction between the rope and the groove in which it runs.

The rope which is used must evidently be the agent by which the weight is transmitted, and its influence must be carefully considered. A rope possesses

two properties, inextensibility and flexibility. By virtue of the former, it is able to transmit pressure in the direction of its length. Thus, if a hook be fastened to the ceiling, and to it one end of a string having half a hundred weight at the other end, the hook has to support the weight just as though it were suspended without the intervention of the string. The string, therefore, has the power of transmitting pressure in the direction of its length, and this it has in consequence of its inextensibility. A bar of metal possesses the same property. But the string has also flexibility, which the metal has not. It is in consequence of this, that, by the use of a flexible rope, a weight acting in one direction may be balanced by a force in any other direction. If a weight acting downwards in the direction PW is to be



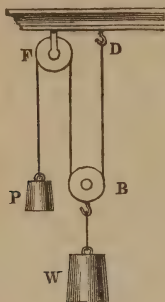
supported in the direction PF , it can only be accomplished by the use of a flexible string, passing through a ring or over a support at P . In theory it is supposed that the string is perfectly smooth and flexible, and that there is no friction between it and the point over which it passes. If this were the case, the string would be stretched with the same force through its entire length, and its tension would be equal to the weight w . But this is not true in practice, for the rope is not perfectly flexible, and friction cannot be altogether prevented; but to avoid these two sources of error as much as possible, it is customary to use a wheel, moving freely on an axle, instead of the ring or support already spoken of. This wheel is called a pulley, and the name has been applied to the machine, as if all the advantage were derived from it; and some writers have maintained that opinion, though evidently erroneous. Pulleys are of two kinds, fixed and moveable. In the fixed pulley, no mechanical advantage is gained; for, as is evident,

* See Weekly Visitor for 1835, pp. 132, 133; 142, 143.

a force must be exerted equal to the weight to be raised, or resistance to be overcome. It is, however, often exceedingly convenient in assisting the labourer to guide the direction of the power. It enables him to oppose a resistance by a power acting in some different direction. Thus a weight acting downwards, as in the diagram on p. 153, may be raised by a power in a contrary direction, or in any intermediate position.

The moveable pulley rises or falls during its use.

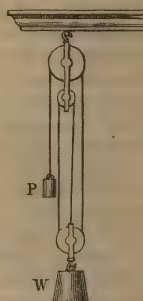
The single moveable pulley or runner, is a machine in which a rope



passes from some fixed point to the power under one moveable pulley, to which the weight is attached, and over one fixed pulley. This instrument enables us not only to alter the direction of the power, but also to increase its effect. The action of the machine is easily understood. It is evident that a rope acted upon by any weight must suffer the same tension in all parts of its length. The same rope extends from the fixed point F to the power P . The weight w is supported at the end of the moveable pulley by the strings DB and DF , and each is engaged in supporting the weight; that is to say, each part of the string sustains half the weight. The power is supported by the tension of the string PF . The tension of PF must be equal to that of FB or BD . But the tension of either of these is equal to half the weight, and hence it follows that the machine will be in equilibrio with a power equal to half the weight. We gain, then, by the use of this modification of the pulley, a power equal to that which is used.

A pulley constructed in the manner

shown in the following diagram, gives greater advantage than that already de-



scribed; for a weight will be kept in equilibrio by a power equal to one-third of its force. The reasoning already adduced in a more simple case is equally applicable to this construction of the machine. It must, however, be remembered that the weight of the moveable pulley must be taken into consideration, and added to the weight to be overcome.

Sometimes a system of pulleys is worked by a single rope. In such cases, there is a moveable block, containing wheels or sheaves, in which the rope runs, and supporting the weight. The principle of action is the same in this as in former cases. Where there is only one rope, and one moveable block, the power will support as many times its weight as there are parts of the rope engaged in supporting the weight; for each part has its portion to carry. Thus, if the weight be distributed among eight ropes, and each be stretched by the force of the weight, the power will support a force equal to four times its own weight.

A great increase of power is sometimes obtained by the use of a number of ropes, but the principle of action is the same as in the constructions already described.

The principle of virtual velocities is obeyed by the pulley as well as by other simple machines, that is to say, the ascent of the weight is so much less than the descent of the power, as the weight is greater than the power. Thus, in fig. 2, if the power P descends two feet, that length of the rope must pass over the pulley F , and the parts DB and BF must be each shortened a foot; the weight, therefore, will be raised one foot, and the power will descend two

feet. Hence, therefore, the velocity of the power is twice as great as that of the weight. The law might be illustrated by a reference to any other form of pulley; but this is unnecessary, for the reader may easily apply the same course of reasoning.

DANGERS AND SUFFERINGS IN THE POLAR SEAS.

THE ship *Norfolk*, commanded by Captain Harrison, with thirty men, sailed from the River Tweed, early on the morning of the 13th April, 1835, for Davis' Straits Fishery, and after calling at Stromness, in the Orkney Islands, and shipping other twenty men, bore away to the scene of their labours, their sufferings, and their dangers. No incidents uncommon to such a voyage occurred, and on the 11th of May "they made the ice." Captain Harrison, in company with almost all the ships and crews engaged in the fishery, sailed up the east side of the straits, with a view to penetrate the mighty barrier of ice that floated between them and that part of the sea where they usually find the objects of their search most plentiful. But although they sailed as far north as $72^{\circ} 45'$, they could find no place at which they could force their vessels into the mighty mass, it was so firmly and compactly wedged together. They were in consequence forced to return southwards, sailing along the edge, anxiously looking out for some favourable place to force their ships into it.

The ice through which they thus sought to force their way, varies in size from pieces two or three feet square, up to the size of as many miles. It is when the ice is somewhat loose that they can force their ships in amongst it, but when a gale of wind comes, the pieces of ice are so closely packed together, that the ships are immoveable, and when caught between two large pieces, they are crushed with as much ease as a man would the shell of an egg with his foot. Another source of great anxiety and alarm is the many icebergs that here and there rise two or three hundred feet above the other pieces. These, presenting so large a surface to the wind, are powerfully acted upon, and when set in motion, plough through the dense mass with irresistible fury, threatening destruction to all within their reach. Yet these dreaded visitants are sometimes,

by the skill and courage of the captains and men, made subservient to promote their interests; for, fixing an ice-anchor in them, they cause them to carry the ship with them in their resistless progress through the barrier, that would otherwise bid defiance to their utmost efforts.

From the unusual quantity of ice produced by the severity of the previous winter, it was with great difficulty that the ships got to the west side at all. It was not until the 11th September, that Capt. Harrison, with five others, reached the "fishing-ground;" and although this, in general, is the season when the fishers think of returning home, yet having been hitherto so unsuccessful, they persevered amid fearful gales of wind in search of fish. At last, however, in despair of success, they sought their way back to their native land. But the great barrier of ice through which they had struggled lay before them, and in this the "*Norfolk*," with other six ships, were doomed to be detained, and to endure hardships hitherto unknown in the history and experience of those engaged in the whale fishery in Davis' Straits.

The days were now fast shortening. The sun was rapidly bidding adieu for a season to those inhospitable regions, and the prospect of a long and dark, and dreary winter, with the thermometer thirty degrees below zero, was rendered yet more appalling by the utter exhaustion of their coals. Their provisions, too, became the object of anxious and painful solicitude. The crew of the "*Norfolk*," especially, were in the most distressing circumstances. Each man was reduced to half a pound of flesh per day, and two pounds of biscuit per week, a quantity scarcely sufficient to support nature. But to all this we must add, that on such a small portion of salt and dry food, every drop of water which they required must be melted, which materially aided in deepening the gloom, which had so powerfully gathered around them, and increasing the privations from which they had no means of escaping. But the winds and the waves were also to be combated, and on the 15th of October, a storm arose, which caused such a pressure, by forcing the ice before it, that the ship, in the midst of it, was cracking as if every plank had been riven asunder. The utmost consternation now filled every heart. Their only shelter and protection seemed gone, provisions and clothes were put

out upon the ice, and the boats carried to a distance, "that if the ship should go," they might make their way to some other ship, or linger out on the cold ice a miserable existence. But God disappointed their fears. He made the storm a calm: the pressure "ceased," and the ship, though fixed to the ice, was yet safe.

Their boats, provisions, and clothes were again taken on board, and in their dreary situation they remained undisturbed till the 20th, when the storm again raged. This day the "Dordon," of Hull, was caught between two large pieces of ice, and so severe was the pressure, that they went right through the sides of the vessel, cutting her into two parts. Provisions and clothes were however, saved. One man was killed: he had been up on the mast for the purpose of securing a sail to shelter them from the cold, when, as it is supposed, he was so benumbed that he lost his hold, and falling with his head upon a wooden bolt, he was literally transfixed, and died instantly. Some individuals had drank to excess, and the cabin being yet entire, these infatuated men kindled a fire on the floor, and intoxicated with spirits, and benumbed with cold, fell fast asleep around it. In a short time, the floor took fire; but they knew not their danger, till rescued by their more prudent companions, though not until some of them were severely burned. One man who was taken on board the "Norfolk," had the flesh and sinews burned from the bones of his legs, and was rendered a cripple. It is said, indeed, that after he was landed at Aberdeen, both legs were amputated. This is another melancholy proof of the sad effects of drunkenness. The crew of the "Dordon" were dispersed among the ships that were near her, when this event took place.

Time now passed drearily away with them, and a visible change was observed in the appearance of the men, the combined effects of want and anxiety. One man on board the "Norfolk" was so much affected, that he became quite melancholy, and spoke in the most touching terms of the wife and the children, and the home, which, as he said, he was never to see. His malady increased, he ran off from the ship along the ice in search of his home, and when followed by his sympathizing comrades, he tried to destroy himself, by lying down in a hole in the ice. Their humanity, however,

prevented him from accomplishing his fearful purpose. He was brought back to the ship, where he shared the attention of the surgeon, and the kindness of all. But on the 5th December, 1835, he was relieved from all earthly fears and sufferings, and two days after, his body was committed to the deep, there to sleep till the sea shall give up its dead. Death had now paid a visit to them, in one of his awful forms, and if, in every visit that he makes to the dwellings of men, he says to the survivors, "Be ye also ready," such a message must have had peculiar force when addressed to men in such circumstances. There is but "a step between us and death" at all times; but when menaced with so many dangers, he must have appeared very near indeed. Day succeeded day, but hope still languished. The ice continued firmly wedged around them, and, as the captain expressed himself, they were like men shut up within the walls of a prison-house, with their death-warrant sealed. But although God was now dealing with them in judgment, he had mercy in reserve, and he was every day displaying his wonders before them. Although they were all firmly fixed and surrounded with ice for many miles on every side, the whole mass was floating southward with the current, and bearing them insensibly onward to the point of deliverance.

The ships drifted from latitude $69\frac{1}{2}$ degrees north, to 60. But as they progressed southward, every day brought its trials. Every gale of wind broke up the ice, and while it may have lighted up a ray of hope in their bosoms, they had to "join trembling with their mirth;" for when the sea rose, the ice was heaving and tossing on the surface of the agitated waters, threatening them with destruction. When carried so far south, and the thought of deliverance was comforting every heart, a sad blight passed over the cheering prospect. A strong current setting into Hudson's Straits, carried them in there, and sent them into Ungara Bay. Here the last ray of hope seemed to be extinguished, and the bravest heart gave way to despondency. Captain Harrison, with his friend Captain Taylor of the "Grenville Bay," of North Shields, consulted, anxious about the lives of their crews, and resolved, by the help of God, to endeavour to make their way down to a British settlement at the extremity of the Bay. But humane

and courageous as was their resolution, the hope of gaining their object was but faint. They were 120 miles from the settlement, and the Bay was full of ice; yet they made the attempt. But although "the heart of man may devise his way, the Lord directeth his steps;" and here it was most beautifully shown. They did every thing that skill and courage could accomplish, yet they could not penetrate. But as some of our old divines have said, "Man's extremity is God's opportunity," so it was here verified, for he sent a wind which forced the mass in which they were fixed, out again into Davis' Straits, when after a few days, both ships got clear of the ice, and bore away from the scene of their hardships, to relieve the anxiety of their friends, and to receive in the warmth of an affectionate welcome, a recompence for the days of suffering which they had endured.—*Abridged from the Edinburgh Christian Instructor.*

THE PANORAMA.

WILL the world ever be persuaded that all expectations of happiness not founded on God are delusive? The soul of man is a ruined, undone existence—a poor deserted, dejected thing, that has not God for its refuge and joy. Give it all of earth that it solicits; multiply around it the ten thousand gratifications of sense; increase within it the still more numerous and delightful pleasures of thought; and if they terminate on earth, its restless desires, and its still more restless imagination, disappointed and deceived, are perpetually in pursuit of something new, some untried good.

I have seen those who imagined they had found the good they were seeking after. But when I have sat down with them in their retirement, have become familiar with their thoughts, and sympathized with their joys, I have marked their solicitude, and uniformly seen that in a little while their sunshine of happiness is obscured by clouds.

Such were the thoughts that passed through my mind, as I sat one evening at my window, gazing upon the busy scenes which every where met my eye. The stir and clamour of a populous city kept on unceasingly around me. The gleaming lights, the quick steps, the passers by, and the rattling of wheels, combined to complete the confusion. Above, as in

contrast, the heavens stretched their immoveable canopy, where the bright stars kept their distant and permanent home. All on earth seemed variable and tumultuous; all above, still, constant, and unchangeable. As the night advanced, and the bustle and noise abated, I became so deeply immersed in reflection, as gradually to lose all consciousness of surrounding objects. They slowly disappeared, and in their place an isolated stage or platform rose before me. At the first, I could discover nothing but its dim outline; but by degrees it took a more definite and palpable form; and as my eye became accustomed to the view, I could discern miniature human figures swarming in countless numbers upon its arena. Some seemed to be pursuing their way slowly, as though occupied with intense thought; others were hurried on with restless activity. Here, was a group holding amicable intercourse; there, two hostile bands arrayed in mimic conflict. The scene seemed indeed a world in miniature, where each station, each employment had its petty representative. The tradesman was vending his wares; the merchant grouping with his fellows upon the mart of traffic; the student with his book; the orator at his desk; the idler lounging listlessly on his way. There were children also careering by in their sports. As I watched more closely, I observed that occasionally, as if by untoward accident, some of these automata became severed from the mechanism which linked the whole together, and suddenly disappeared. The scene, however, was so crowded and confused, that it was some time before I discovered that this occurrence was common to them all. Some indeed vanished as soon as they appeared; others passed some way across the stage; and a few I could trace even to its extreme verge, but eventually they were like all the rest. In the midst of their restless career, all in their turn disappeared, and their places were occupied by a new succession of the same busy figures. As I watched their hurried motions, their strange gesticulations, their striving and pushing heedlessly on their way, I was moved to smile, and exclaimed, "What a singular, what an unmeaning scene!"

"Dost thou smile?" said a voice near me. "Look again. It is the Panorama of human life." As I looked again, every thing appeared to increase in magnitude. The curtain which overhung

the scene seemed to be gradually extended, until it reached and became commensurate with the heavens. From its dark folds the stars shone out mildly, obscured at intervals by passing clouds. The petty stage upon which it had before rested was magnified into a world, and the figures which traversed it so incessantly, became living, breathing men, crossing to and fro upon its surface. The smile fled from my lips, and I watched it with redoubled interest. The scene now had a voice which pierced to the inmost depths of my heart. A complete and perfect picture of human life was presented to my imagination, with all its varied peculiarities distinctly exhibited. Some were upon the mart of business, listening to the details of profitable adventure, and planning a thousand ways to add to their increasing wealth. Others were buried in vain amusements, and seemed to derive their highest gratification from the pleasures of sense. There were groups of labourers and artisans employed in useful industry. Farther on were the votaries of science crowding to her gorgeous temples. Pride was rolling in his chariot, Poverty gleaning the refuse of the streets, and the children were at their sports. All seemed incessantly busy, and alternately enwrap and wearied with their pursuits. Amid the tumult, strife, and gaiety which prevailed, one and another would suddenly disappear from the scene. The child in the height and bloom of its buoyant life was arrested by the cold grasp of death, and, damp with a mother's tears, was coffined, and borne away no more to revisit the world. The youth, the man passed in a moment from the scene where all their hopes seemed centred, ushered thence by the same remorseless hand. Nor did the aged escape from the common destiny. Yet still the bustle and activity of all around continued unabated. They seemed not to heed the fate of those who were snatched away, or scarcely to grieve for their absence, but hurried forward in their course as though in the pursuit of some invaluable good.

"What seek they so ardently?" I exclaimed aloud. "The object of this search must be of great moment, since they are thus eager in the pursuit. Yet what do they attain, but death? Is it this? Is it repose from that unceasing restlessness, that seems inflicted as a curse upon them?"

Nothing is farther from their

thoughts, neither does death bring repose to such as these," said the same voice which I had before heard.

"What then do they seek?"

"HAPPINESS."

I could not speak for wondering at this reply. I knew that they were my fellow-men, and wept for their delusion, remembering my own. Can it be so?—I thought—can self-deceit carry its victims so far? Will men never awake to a sense of their true interest? Are all these seeking after happiness? Can those thus flatter themselves who are plunged in the pleasures of sin; who seek their own to the injury of others—this world at the expense of another—themselves rather than God?

As I continued to watch what was passing before me, I soon discovered that the success of these infatuated beings in their search for happiness was such as might be expected from the means they adopted to attain to it. Hope continually animated them, but a hope never realized. Their efforts were unceasing, but vain. Boisterous mirth, exultation, self-gratulation, sometimes lighted up their features; but these emotions would quickly subside, leaving them a prey to disquietude and remorse. The mart of business was a scene of trivial vexations, murmuring, and mutual distrust. The field of labour and the occupations of industry were crowded with care and hardship, with turmoil and disappointment, and with glittering phantoms that were embraced for substantial reality. Pleasure lighted up its gaudy lamp, while the thoughtless insect that gaily fluttered around it was consumed by its flame. Power struggled over the arena of its conflicts, grasped its little world, and wept that it had not another world to conquer. The sons of pride, slow to learn that earthly good could deceive them, wandered from one source of expectation to another, perpetually disappointed. Even childhood, joyous and careless as it seemed, showed by its continual change and restlessness, that its ultimate desires were unattained. There were hidden recesses also all around this vast scene, which though they courted not the eye, were every where receiving this busy multitude in untold numbers. Here was one indicated by its meagre ornament, where had withdrawn the children of obscurity and insignificance, of disappointment and poverty, of pain and disease. Here was another, hung in

sable, where many a hope was extinguished, and many a swollen and broken heart had retired to conceal its sorrows. And here was another—the place of lamentations and tears—where many an accent of woe was heard, and many a sigh was extorted, which no resolution and no pride of character could suppress.

If there were exceptions to these, I saw them here and there in a humble individual, who in all his course had his eyes stedfastly fixed on heaven. Almost perpetual tranquillity seemed to rest upon his features. Seasons of trial at times assailed him, and misfortune and self-humiliation often cast a cloud over his brow; but it was a cloud coloured with the hues of the rainbow. When my eye followed such a one to that grave into which the rest sank with such reluctance, and not a few of them with despair, I could not discover a regret or a fear interrupting his repose. When death unfolded him in his cold arms, he seemed insensible to his terrors, and fell calmly to rest. I could well understand that such had rightly sought and had truly attained lasting happiness; but for the rest, their object seemed uncertain, their exertions useless, their life a troubled sea, their death unsoothed by remembrance or expectation. And could you ask them, one by one, each would confess that it is a vain thing to have set his affections on the earth.

“Thou art thyself an actor in this scene,” said the voice. “Examine thy heart and life. See if thine own search has not been after happiness—if thou hast obtained it—and from whence.”

I listened,—I gave myself up to thought, and as the scene before me slowly disappeared, reflections like the following passed through my mind.

It is kind in the Father of mercies to disappoint the hopes that rest on earth, that the soul may find her rest in him. Earth may satisfy the unintellectual creation, but can never satisfy a mind that pants for immortality. The very largeness of its desires makes it unhappy. This world has not enough for such a grasping, undying existence. All excellency and all blessedness meet in God, and are derived from him. The moon at midnight shining upon the dark ocean, the distant promontory towering upon the tempest-tost mariner, the morning star arising on the benighted wanderer of the desert, and the opening of the spring

in all the richness and beauty of its vegetation after the chill, bleak blasts of winter have gone by, are not more gladsome than the light of His countenance when it pours its consolations upon the soul.

Ye, then, who are allured by the imaginations of future greatness; ye who are seduced by the hope of wealth; ye who are enchanted by the prospects of pleasure; ye who are charmed by endearments which seem to have the power of beguiling every sorrow, and by a sort of secret incantation controlling the troubled mind—learn from the experience of ten thousand hearts, that here is but a conflict of desires and expectations which this world can never gratify. Pursue it as you will, distribute as you will all its enjoyments; neither its knowledge nor its riches, neither its attachments nor its honours, neither its leisure nor its toil, can fill the void which in every renewed mind is occupied by the love of God. You must look where no human eye has ever penetrated, to find happiness out of Him.—*Dr. Spring.*

ILLUSTRATION OF SCRIPTURE.

“Thou shalt grope at noon-day, as the blind gropeth in darkness.”—Deut. xxviii. 29.

THE meaning and force of this passage are not at once apparent. Thus the Rabbi Jose says, “All my days did I feel pain at not being able to explain it; for what difference can it be to the blind man, whether he walketh in the light or in the dark? And yet,” he adds, “the sacred penman would not have put down a word unnecessarily. What then does it mean?”

Still the question remained unanswered, and that to the distress of the Rabbi. But “one night,” he continues, “as I was walking in the road, I met a blind man with a lighted torch in his hand. ‘Son,’ said I, ‘why dost thou carry that torch? thou canst not see its light!’ ‘Friend,’ replied the blind man, ‘true it is I cannot see it, but others can: as long as I carry this lighted torch in my hand, the sons of men see me, take compassion on me, apprise me of danger, and save me from pit-falls, from thorns and briers.’”

Thus was the mind of the Rabbi greatly relieved; he felt that the apparently superfluous word was meant to predict the greatness of the calamities

that were to befall the Jewish people. Even at noon-day, they were to grope as the blind do in darkness, without a ray of light to exhibit their distress, and to appeal to the compassion of those who pass by.

The fact now given is associated in the mind of the writer with another, which will render the declaration of Moses still more impressive. Some time since, he heard that a blind man, who had to return home at night from the house of a friend, and as his practice was, alone, remarked to some acquaintance that accosted him on the way, that the night must be very dark. Surprised at the observation, the person addressed asked how he knew it was so, when he at once replied, that such was his conclusion because persons pushed so much against him.

How strikingly then is the prediction fulfilled in the point of view which is thus suggested! The Jews, like the blind groping in darkness, have not merely been refused sympathy and help, but have been exposed to insult and violence.

Their history, however, is only one proof among many that it is "a bitter," as well as an "evil thing to sin against God." Never will the declaration be altered, "The way of transgressors is hard." Sin and sorrow are as inseparably connected as holiness with happiness. Let us then constantly remember the words of the inspired apostle, when addressing the Galatians, ch. vi. 7, 8:

"Be not deceived; God is not mocked, for whatsoever a man soweth, that shall he also reap. For he that soweth to his flesh shall of the flesh reap corruption; but he that soweth to the Spirit shall of the Spirit reap life everlasting." S.

REPENTANCE.

To repent, is to accuse and condemn ourselves, to charge upon ourselves the desert of hell; to take part with God against ourselves, and to justify him in all that he does against us, to be ashamed and confounded for our sins, to have them ever in our eyes, and at all times upon our hearts, that we may be in daily sorrow for them; to part with our right hands and eyes, that is, with those pleasurable sins which have been as dear to us as our lives, so as never to have

to do with them more, and to hate them, so as to destroy them, as things which, by nature, we are wholly disinclined to. For we naturally love and think well of ourselves, hide our deformities, lessen and excuse our faults, indulge ourselves in the things that please us; are mad upon our lusts, and follow them, though to our own destruction.

Some reject repentance as a legal and needless thing; some counterfeit and dissemble it; some mistake it; but most neglect and delay it. Mistakes and delays are two great impediments to it, yet more persons delay than refuse it. Our passage to heaven is dangerous; we either split on the rock of presumption, or fall into the gulf of despair; and all delays are grounded either in despair or presumption. The former arises, either from a sense of the greatness of sin, as unpardonable; or a fear of the loss of time, as irrevocable: the latter is grounded either on the length of God's patience, the greatness of his mercy, the hope of long life, the power of repenting at pleasure, or the examples of those that found mercy upon a late repentance.

The great policy of the devil is either to enlarge God's mercy above the bounds of the law, or his justice above the bounds of the gospel; he either presents God's mercy in a false glass, to make sinners presume, or his justice to bring them to despair. Before sin is committed, he tells them it is a trifle, and will easily be pardoned; but when committed, then it is great, too great for pardon: and though he is the father of lies, they give credit to him, and conclude that their sins, their many and great sins, will never be pardoned: whereas mercy is revealed, as the sanctuary of the distressed, the balm of the wounded, the refuge of the burdened, the cordial of fainting, the hope of living, the joy and reviving of dying sinners.—*Francis Fuller.*

DEITY OF CHRIST.

If Christ were only a man, why should he so often say he was the Son of man, and affirm the superiority of the Father? The charge of absurdity is escaped only as his Divinity is admitted.—*Coleridge.*



The Meeting of Henry and Francis at the Field of the Cloth of Gold.

HENRY VIII.

PART I.—FROM A.D. 1509, TO A.D. 1527.

THE reign of Henry VIII. is the most important in the British annals, both with reference to the events that occurred therein, and to the result of those events. And this remark is applicable not only to the English nation, but also to the world at large. These events have been differently represented, and are spoken of in very opposite terms, according to the feelings of speakers or writers, rather than from the effect of patient and impartial consideration. But the particulars concerning the history of this reign are now fully unfolded to the world, from original public and private documents, so that those who possess leisure, have an opportunity to examine the subject. In the following pages, only brief and for the most part general notices of this eventful period can be given; but they are the results of the examination of many volumes, it is trusted with a desire for impartial research.

The events of this reign may be divided into three periods. 1. The early transactions previous to Henry's desire to be divorced from Catherine of Arragon. 2. The king's contest with the pope, and the reformation which followed the east-

ing off of the papal supremacy. 3. The stormy latter years of this monarch.

The accession of Henry VIII., at the age of eighteen, was hailed by his subjects with much joy. His father, though he sought in many respects the welfare of the people, was very unpopular during his latter years, chiefly from the excessive pecuniary exactions he levied, but also from his severe measures in other respects. Under these circumstances, the young king could not but be highly popular, possessing many advantages, both natural and acquired, and having an undoubted title to the throne by descent, as well as by the voice of the nation. Being the second son, his father had destined him for the church; therefore, at an early age, his attention was directed to literary pursuits. The seed fell into a favourable soil; though at twelve years of age, he became heir to the throne, yet the young Henry had imbibed a taste for learning, which he cultivated even beyond the average of the leading scholars of that day. His person was healthy and well-formed, such as to command admiration, and enable him to take part in all the active sports then practised. His temper and disposition were frank, courteous, amiable, condescending; he was inclined to promote the enjoyments of those

around him, while his habits of application qualified him to attend to state affairs. In directing these, he at first attended to the advice of the able ministers whom he collected about him. He engaged in pastimes and recreations, yet did not suffer himself to be wholly engrossed by them.

Such was Henry VIII. during the early years of his reign, as described by contemporary writers, some of whom openly opposed his proceedings in more advanced life. Those who only know Henry through the writings of controversialists, are unacquainted with his early character as described by Erasmus, Pace, and some other Romanists, who cannot be considered merely as personal flatterers.

Henry VIII. was proclaimed king, April 23, 1509, the day after his father's decease. One of the first acts of the new monarch and his council was, to carry into effect the desire of the late king, by remitting the outstanding demands against many individuals, and returning the amount of numerous fines which had been unjustly levied. The popular outcry against Empson and Dudley, the ministers by whose instrumentality fines were levied, was so great, that they were sacrificed to the displeasure of the nation. They were imprisoned; but no just ground of accusation could be found, for they had acted in obedience to the commands of the late king. Yet, in the following year, they were found guilty, and executed for high treason, on an absurd charge that they had conspired against Henry VII. The king probably acted contrary to his better judgment, to satisfy the public outcry against these unhappy agents of his father.

The new ministers of state were chosen by the advice of the Countess of Richmond, the venerable grandmother of the king. She became a wife and mother at a very early age, and was shortly afterwards left a widow, but she acted, during a long life, with singular wisdom and prudence. Archbishop Warham, and bishop Fox, were skilful administrators of public affairs when matters of religion were not concerned; the latter had been much employed in foreign negotiations. The Earl of Surrey, with others, were able conductors of military affairs, according to the views of that day. Attention was immediately directed to the princess Catherine of Arragon. She had been for a few

months the wife of prince Arthur. On his death, the late king detained her in England; at first to clear any question as to her having children, and then that she might become the wife of prince Henry, when he should be of sufficient age, lest the pecuniary and political advantages of the union should be lost. Her father, Ferdinand, king of Spain, consented to this marriage, which the pope Julius III. authorized by a bull or decree, in which, as usual in those instruments, he assumed power to dispense with the laws both of God and of man. The princess was not averse to the marriage; however, the youthful Henry, then twelve years old, was displeased. Henry VII. was at first eager for the union, but afterwards disinclined to it, when age and infirmities turned his thoughts to matters beyond mere worldly policy. He was advised against the marriage by archbishop Warham and others, but his proceedings were irresolute and vacillating. In June, 1505, when the prince attained his fourteenth year, his father caused him to sign and read before the council a declaration that he would not fulfil the contract with Catherine, but this proceeding was concealed from Ferdinand, and the princess continued to reside in England. Fox, bishop of Winchester, one of the chief counsellors, states, that notwithstanding the protestation and the delay, the union was still contemplated by Henry VII.

During this interval, the young king's mind became more favourably disposed towards Catherine; there were also some apprehensions lest her marriage with any one else might tend to disturb him on the throne; as one ground of the claim urged by Henry VII. had been descent from the widow of Henry V. It is probable that various considerations rendered this union desirable; therefore the bull of Julius III. was considered a sufficient dispensation. The marriage was solemnized on June 3, six weeks after the king's accession; it was followed by a coronation on the 24th, unusually splendid. The queen was pleasing in her person, "beautiful and goodly to behold." She was five years older than the king, learned beyond what was usual for females; dignified in her manners, and attached to the ceremonials of the Romish church, to an extent which rendered her superstitious and bigoted. She possessed the affections of her husband, and among all the gaieties of the

court, he treated her with kindness and respect. They lived for several years in domestic harmony. Whatever may be supposed by some, the early court of Henry VIII. was comparatively correct amidst all the rudeness and grossness of the age. Even Erasmus, ten years afterwards, speaks of the king and queen as affording an example of "chaste and concordant wedlock." The encouragement of learned men, and of the polite arts, is frequently noticed. There was, however, a turn for showy pastimes, especially the expensive pageants then common, which rapidly diminished the royal treasures. Part of these were also lavished upon a costly troop of horse-guards, and part upon the continual celebration of jousts and tournaments, of which Henry was very fond, while his health and strength allowed him to join in them. His muscular frame, and well exercised strength, made him usually the most distinguished in these mimic combats, even more than from any inclination of his opponent to submit to his arm. The royal taste for these pleasures, and for convivial enjoyments, was speedily carried to excess, being encouraged by Thomas Wolsey, who, as the royal almoner, had constant access to the king, whereby he soon acquired great influence over him.

Wolsey, the son of a butcher, was born at Ipswich in 1471. He was early a student at Oxford. Being admitted to the clerical order, he showed himself a lover of pleasure more than a lover of God: while priest of a country parish, he was set publicly in the stocks for taking part in a drunken riot; but such was the degraded conduct of ecclesiastics in those days, that this did not prevent his subsequent preferment. Having become tutor to the sons of the marquis of Dorset, he obtained the patronage of that nobleman, and a benefice; afterwards he was placed upon the list of royal chaplains. An opportunity for showing great promptness and ability during a negotiation between Henry VI. and the emperor Maximilian, led to his appointment to the deanery of Lincoln, which was followed by further rewards and offices in the church. At that time it was not uncommon for ecclesiastics to be employed in secular affairs. Such proceedings have ever been hurtful to the church and the country in which they occur. Bishop Fox, observing Wolsey's pleasant qualities as a companion, and the suppleness

of his behaviour, recommended him to the notice of Henry VIII., thinking thus to supplant the earl of Surrey, to whom the king was much attached, from his readiness to comply with his expensive and prodigal turn. Thus Wolsey was brought into the royal council, where he soon established himself as chief minister.

Europe was then in a peculiar situation, which caused Henry to be courted by all the leading powers. The rivalry between France and Spain, which continued to agitate the continent during the succeeding century, had begun to appear. France was strengthened by recent accessions to her dominions; while the treasures of the new world poured into Spain, where Ferdinand had united several petty kingdoms: this gave increased weight and influence to that monarch and his successors. The popedom, under its successive rulers, had for some time taken an active part in the political proceedings of the times. The empire of Germany, in alliance with Spain, was threatened from the east by the Turks. Such was the aspect which a few years openly brought forward, but for a time the warfare consequent on these political proceedings was carried on in a desultory and inefficient manner.

The pope, Julius III., was one of the foremost in stirring up Henry to engage in warfare. He sent him a golden bangle in the form of a rose, perfumed with musk, and greased with consecrated oil, considered an honourable gift from the pope to a king! The pontiff also saluted Henry as head of the Italian league. He was elated by the papal flattery, which at that period had a powerful influence over the minds of European monarchs, according to the declaration contained in Scripture: "Babylon hath been a golden cup in the Lord's hand, that made all the earth drunken: the nations have drunken of her wine; therefore the nations are mad," Jer. li. 7. 9, see also Rev. xviii. 2. Hoping to recover Guienne and the neighbouring provinces, Henry declared his readiness to interfere in the affairs of the continent, against the advice of some of his ablest counsellors, who urged, that if the nation took part in foreign affairs, it should rather be by claiming a participation in the lately discovered regions of the east and west.

An expedition was undertaken against France in 1512, but returned without the expected success, having been em-

ployed by the Spanish monarch to forward his own designs in Navarre. In the following year, Henry headed an army which landed at Calais, acting in alliance with the emperor of Germany. After an expensive campaign, he besieged and took Terouenne and Tournay. This expedition effected nothing of importance, though at one time the French monarchy was in great peril. Henry was successful in a skirmish, called the battle of the Spurs; had the victory been followed up, the main French army would in all probability have given way. The French king expected this, and was prepared to flee from Paris.

Meanwhile, James iv., king of Scotland, was induced to declare war against his brother-in-law, and to invade England, notwithstanding the earnest remonstrances of queen Margaret, aided by his best counsellors. The earl of Surrey, with an equal English force, encountered the Scots at Flodden, when James fell with most of his nobles, among whom was an archbishop and three bishops. This battle was most disastrous to the power of Scotland. The earl of Surrey was created duke of Norfolk in consequence of his success.

The state of affairs on the continent changed; but we need not go into detail; while the objects immediately in dispute were insignificant, the results obtained were unimportant. Henry found that his allies ceased to prosecute the war; the archduke Charles declined to marry Henry's sister Mary, and the popedom had passed into other hands. He therefore made peace with Lewis; a marriage between the princess Mary and the French king was planned and carried into effect, in the autumn of 1514; but that sickly aged monarch died within three months, on January 1, 1515; and was succeeded on the throne by his kinsman, Francis I. His widow, in a few weeks, gave her hand to Charles Brandon, duke of Suffolk, who had been sent to conduct her to England. Anne Boleyn was one of her attendants, then merely a child; she remained at the French court. The indiscreet second marriage of his sister much displeased Henry, as she would have been sought after by other monarchs; but the princess resolved not to be again sacrificed to political interests; her brother was reconciled, after a short interval of resentment. Suffolk enjoyed the royal favour till his decease, shortly before the death of Henry.

Wolsey had by this time established his power. He encouraged the king in scholastic studies, and engaged him in showy and expensive pleasures, himself undertaking all the cares of government. The king gladly adopted this course, believing that all matters of moment would be brought before him for final decision, so as to remain under his own direction. In 1513, Wolsey was appointed bishop of Tournay, in the following year bishop of Lincoln, and soon after archbishop of York. He rapidly ascended the pinnacle of human greatness. The king and queen wrote to him, using confidential terms; every affair of importance was referred to him. He grasped at universal control, and accumulated wealth with an unsparing hand. Ambition, with thirst for power and flattery, were Wolsey's ruling passions; these were gratified by his influence over the king, which was so great, that some contemporaries ascribed it to the power of Satan. There can be no doubt that it was promoted by Satanic principles, but it was the immediate result of a mind at once supple and resolute. He ruled the king by humouring his views and feelings, whether praiseworthy or evil. Wolsey avoided the error into which Becket fell: he defied not the power of the king; but by submitting to his caprices, he obtained direct mastery over all others, in reality controlling the king himself. Wolsey also possessed a master mind; he had access to the various means which most influenced the different classes of that day, and availed himself of them. Fox, bishop of Winchester, archbishop Warham, the duke of Norfolk, even the personal favourite, the duke of Suffolk, all retired before him, losing their political power. In 1515, he obtained the dignity of cardinal, which placed him above every other subject in the realm. In the following year, he reached the summit of grandeur, both civil and ecclesiastical; the former by taking the office of lord chancellor, which Warham resigned, disgusted at the arrogance of the new favourite; the latter, by obtaining from the pope the appointment of legate in England. Other bishoprics and abbacies were added to his benefices, to increase his wealth. He now sat at the right hand of the king, and claimed the honours due to royalty alone. He assumed a state and pomp which excited the wonder and displeasure of the nobility and gentry, but dazzled the populace for

a time: this increased his power, while it gratified his vanity; but it hastened his downfall. At first it strengthened his influence over Henry, who gratified his taste for display and showy amusements, by beholding the state of the cardinal, and partaking of the entertainments Wolsey provided or suggested.

Hall, in his *Chronicles*, minutely describes many of these shows; one extract may be given as a specimen; the scene was at Greenwich, at Christmas, in the year 1516. "There entered into the hall an artificial garden, called the Garden of Esperance. This garden was towered at every corner, and railed with gilt rails. All the banks were set with artificial flowers of silk and gold, the leaves cut of green satin, so that they seemed real flowers. In the midst of this garden was a pillar of antique work, all gold, set with pearls and stones; and on the top of this pillar, which was six square, was an arch embowed around with gold; within which stood a bush of red and white roses, all of silk and gold, and a bush of pomgranates of like stuff. In this garden walked six knights, and six ladies richly apparelled, and then they descended and danced many goodly dances, and so ascended the garden again, and were conveyed out of the hall; and then the king was served with a great banquet." It seems to have been much such a show, except as to the expense, as might now be got up to amuse a party of children. A cart decked out with artificial flowers, of satin and gold, was drawn into the hall with twelve people standing in it; after they had got down, and jumped about the hall for a time, they climbed up into the cart, and it was drawn out again!

Yet in many respects Wolsey benefited his country; he often restrained the wealthy and powerful from acts of violence towards the lower classes; he collected around him men of ability, whom he placed in various offices of power and business; he encouraged literature, no trifling benefit in an age when a noble could maintain to the royal secretary Pace, that it was enough for noblemen's sons to sound their hunting horns well, and carry their hawks, while study and learning might be left to the children of labourers. In many respects, Wolsey thus unconsciously made a way for the beneficial changes that followed.

Coming events cast their shadows before; the first direct indications of the

approaching storm which overthrew the usurpations of the Romish clergy, appeared in 1515. It arose from what appeared a trifling matter. Richard Hunne, a citizen of London, refused to pay an extortionate fee claimed by a priest on account of the death of his child: for this he was prosecuted in an ecclesiastical court, but he retorted by suing the priest in the King's Bench. A charge of heresy was then brought against Hunne, which enabled the ecclesiastics to imprison him in the Lollards' Tower, the bishop's prison for heretics, adjoining the cathedral of St. Paul. Here he was found hanging; the priests affirmed he had committed self-murder, but a coroner's inquest being held, it was proved that he had been murdered by Dr. Horsey, the chancellor of the diocese, with two assistants, one of whom afterwards confessed his guilt; and that they had hung up the body after death, to make it pass for an act of self-destruction. The popular indignation was roused. Bishop Fitzjames thought to stop it by pronouncing the deceased to have been guilty of heresy, merely because a copy of the English Bible was found among his effects. The body was sentenced to be dug up and burned!

This proceeding only increased the popular feeling against the priests. The House of Commons restored the property of Hunne to his children, and brought forward a bill against the assassins, which was strenuously opposed by the bishop of London. The contest took an important form. It was assumed by the clergy, that for all offences, even the most heinous, they were amenable only to their own courts, where they could only be tried by prelates and ecclesiastical officers. The king, with the nation at large, would not submit to this iniquitous claim of privilege, which had enabled many ecclesiastics to commit the vilest crimes with impunity. A compromise was effected. The murderers of Hunne submitted to the civil power; it being privately arranged that the prosecution should be dropped. Thus the clergy escaped the disgrace incurred by one of their order, but were compelled to submit to the royal prerogative. The citizens of London were fully convinced of the evil principles and practices of the Romish ecclesiastics. From that time an increasing number in the metropolis were disposed to forward the Reformation. The clergy were also compelled

to drop proceedings against Dr. Standish, the king's counsel, who had vehemently opposed their usurpations, and was bitterly persecuted by his brethren. All this gave Henry an advantage which he soon pressed farther.

Wolsey saw that his master was decidedly bent upon hindering the ecclesiastics from making themselves independent of the other orders of society. He did not oppose the royal will, though he desired that the ecclesiastical order should be pre-eminent. The details thus given show that the awful proceedings of the priesthood in that day, required very high authority and strong power to cast down these persecutors of God's heritage. We need scarcely advert to the unholy and licentious lives of many of the leading clergy. Wolsey himself did not hesitate to procure appointments and honours for his own illegitimate children.

The principal event in the year 1516 was closely connected with the subject just adverted to, the supremacy of Rome. A princess was born, afterwards queen Mary, whose bigoted cruelty completed the downfall of popery in England, by inspiring a horror of the principles of that persecuting faith. This impression kept the country exclusively protestant for more than two centuries and a half, and is not yet entirely forgotten.

In this year also, the great apostle of the reformation in Germany began to devote his attention to the errors and usurpations of popery, against which, in the year following, he stood forth an open opposer. From his letters, it appears that Luther had now advanced so far as to discern that the righteousness of Christ, freely imputed to the believer, is the only ground for a sinner's acceptance with God. When the mind is enlightened by the Holy Spirit thus to discern the truth as it is in Jesus, it will not long remain in bondage to the spirit of antichrist, the man of sin, who opposeth and exalteth himself above all that is called God, or that is worshipped, 2 Thess. ii.

The intercourse between England and the continent was still actively carried forward by negotiations and treaties. Alliances were planned, and a conditional marriage between the English princess and a French prince was projected even before the birth of the latter. A few months after that event, a regular treaty was entered into, which, like the general-

ity of such arrangements, never was acted upon. But Francis gained his immediate object, the restoration of Tournay, by the influence of Wolsey, who accepted large sums from the French king, and would have given up Calais, had he not feared the national indignation. The great object of the cardinal's diplomatic ingenuity, was to get large sums for himself from the different powers of Europe. In this he was successful; but his income, however considerable, was absorbed by the style he maintained, and the large bribes he gave, to forward his ardent desire to be elevated to the papedom. To promote these selfish views, he frequently sent his own emissaries with the king's ambassadors to foreign courts, who gave him private reports of what passed, and even interfered with the public negotiations. Some of these reports still remain among the public collections of letters and other documents of those times.

The French king having succeeded in getting the English troops withdrawn from France, the common soldiers were disbanded; many of them became robbers, while the officers brought home the luxurious and vicious habits they had formed on the continent. The displeasure of the Londoners against foreigners, was excited at this time by various circumstances, which led to a tumult on May day, 1517; it was put down by an armed force, and several of the ringleaders were executed.

One circumstance peculiar to the sixteenth century, was a well-founded apprehension of the Turkish power, then threatening Christendom. Constantinople had been taken by the Turks in 1453, after which, the followers of the false prophet Mohammed pressed hard upon the eastern countries of Europe. A mutual league was entered into by the leading European powers; but the principal result of this treaty was a vain display of expensive magnificence in the embassies between different countries, particularly England and France. These expensive shows were one principal means by which the accumulated treasures inherited by Henry, were dispersed.

The pope, as usual, availed himself of the prevailing apprehension to further his own selfish ends. He urged a crusade against the Turks; to promote this, he sent Campeggio to be his legate in England; but Henry could not be induced to take measures which the pope would have used to supply his own coffers.

Wolsey, however, increased his own power by the establishment of a Legantine court, which exercised inquisitorial control over both laity and clergy. The entry of the Italian prelate into London was delayed till some additions were made to his retinue by order of the cardinal; but the derision of the spectators was excited by an incident that occurred as the procession passed through London. One of the sumpter mules falling, its burden was exposed to view, and proved to be a collection of rubbish covered with a cloth of state to make a show.

The death of Maximilian, emperor of Germany, in 1519, did away the results expected from these treaties. The leading monarchs of Europe became candidates for the succession, which rested in the choice of seven electoral princes. Wolsey, equally ambitious with his king, was planning to obtain the papacy, expected soon to become vacant; to this object he directed his strongest efforts. An immense number of official letters and other public documents of this period yet remain, showing the earnestness with which the great men, as they were called, of this age, contended for empty earthly honours. The Spanish monarch, Charles v., who was grandson to the late emperor, supported his claim by large pecuniary bribes. He obtained the imperial crown after it had been declined by Frederic of Saxony, who was the great friend and protector of Luther.

While the most powerful ecclesiastic in Britain was engaged in the vain pursuit of earthly honours, he promoted rather than hindered the persecutions of the other prelates. The records of their dioceses present melancholy instances of the extent of persecution: parents and children, brothers and sisters, masters and servants, were encouraged and compelled to accuse each other. The reader will find some particulars in the "Lollards," published by the Religious Tract Society; also in the first volume of "The British Reformers:" but one remarkable instance must not be passed by. In the year 1519, six men and one woman were burned together in the same fire, at Coventry. The only accusation against them was their having taught their children the Lord's Prayer and the Ten Commandments in English. While the nobles and prelates directed their attention to the empty shows and vain strifes of this world, many of the middle

and lower classes of the people were listening to the word of life and profiting thereby. Some preachers of the gospel went about the country, attired in humble garb, instructing from cottage to cottage; assembling a few peasants in the dead of the night, or venturing to teach by day in a secluded wood or on a village green, while the emissaries of the Romish clergy, thirsting for their blood, tracked them from place to place, nor stayed till they brought them to the dungeon or the fiery pile. Such were Mann, Tyball, Maxwell, and Stacy; characters despised of men, but who doubtless now enjoy the fulfilment of the declaration by the prophet Daniel, "They that turn many to righteousness, shall shine as the stars for ever and ever;" though Wolsey and his contemporaries, who shone like meteors in their day, it is to be feared, are now in "the blackness of darkness for ever."

Adrian, the tutor of the new emperor, was elected pope after a political struggle of fourteen days. It is to the credit of Wolsey, that one objection against him was a fear, that he would reform the papal court, though probably such a proceeding would only have resulted from his attachment to external show and vain display.

Francis I., king of France, and Charles, emperor of Germany, now readily opposed each other. The balance was thought to rest with England. This was what Wolsey desired; he therefore refrained for a time from absolutely committing himself to either power; but he acted in a crooked and deceitful manner: the means he used were dishonourable, and not likely to be of lasting benefit.

To promote the views of Wolsey, and to gratify the fondness of Henry for pomp and show, a personal interview between the monarchs of France and England was arranged. This took place at Ardres, in June, 1520. The costly display of the kings and their nobles on this occasion, was excessive, as appears from the name given to the conference, "The field of the cloth of gold." Besides the gratification of the vanity of Henry and his minister by this display, they thereby lowered the power of many proud nobles and gentry, whose expenditure on this occasion severely affected their property, so as greatly to lessen their influence and power. Many appeared on this occasion, as a contemporary observed, "carrying their estates, fields,

houses, and woods, upon their backs." It was one of the last public displays of chivalric pomp on a large scale. The two monarchs exhibited their skill and agility in tilting-matches, while each in turn showed knightly courtesy and confidence, by visiting the other's quarters without attendance. Francis set the example: one morning he rode alone to the English royal residence, where finding Henry in bed, he assisted him to rise, and acted as his valet. Henry returned the compliment on a future day. On other occasions each monarch was attended by the guards of the other. One day, Henry challenged Francis to wrestle, when he was thrown by the superior adroitness of the French king. All appeared fair and friendly; and the monarchs separated with mutual professions of regard; but in a few weeks, very different proceedings were planned. Henry proceeded to visit the emperor Charles, when Wolsey secretly negotiated an alliance against France; but this remained a profound secret.

Soon after the return of Henry from France, the duke of Buckingham was disgraced, tried, and executed. He was one of the chief English nobles, and exercised the office of high constable. Haughty and independent, he could not brook the arrogance of Wolsey; he vainly trusted to personal favour with the king, but was imprisoned and found guilty of high treason. His real offence seems to have been his opposition to Wolsey, and his being descended from Thomas of Woodstock, the youngest son of Edward III., which gave him some faint hopes of succeeding to the throne, if Henry died childless. Under a monarch so jealous of every branch of royalty, and a prime minister so proud and unscrupulous, Buckingham suffered for accusations, which, under other circumstances, would not have been regarded. He was the fifth, in direct line of father and son, who during less than one hundred and twenty years, suffered violent deaths either in battle or by the hand of the executioner! His fate made the nobles fearful of incurring the displeasure of the king and his favourite.

Francis and Charles agreed to refer their differences to Henry. It was arranged that the chancellors of the contending monarchs should meet Wolsey at Calais, whither he proceeded with his train, feeling himself to be the arbiter of Europe. In this conference all was

hollow, for Wolsey had previously resolved to support Charles against Francis. The latter was the only party who acted with any degree of openness and candour; he remained on his guard, and prepared for war.

From Calais, Wolsey proceeded to Bruges; there, under the guise of farther mediation, he concluded a secret treaty for the invasion of France by Spain and England, in 1523, till which time, their purposes were to be concealed. To secure the pope's concurrence, both monarchs pledged themselves to violent measures against the opponents of popery. Still further to please the pope, and to promote his own endeavours for obtaining the papal chair, Wolsey flattered his master's conceit of scholarship, by inducing him to write a book against Luther, in which he maintained the supremacy of the pope. This was against the advice of Sir Thomas More, who foresaw the possibility of a future collision with the papal see. Luther speedily replied to this book in strong terms, using language which excited Henry's personal displeasure. These royal efforts were rewarded by the pope's conferring upon him the empty title of "Defender of the Faith," still retained by protestant monarchs, though applied in another sense. The conferences at Calais were interrupted by the partial success of the imperial forces; but we need not pursue the military events of this warfare; the interposition of England checked the success of Francis.

Early in January, 1522, Wolsey found himself again disappointed of his hopes of the papacy. This event rendered the cardinal less anxious to assist Charles, whose duplicity could no longer be hidden; but that emperor visited London in June, and by promising a pension to Wolsey, he again procured the support of England. Charles was received with much pomp; a long series of pageants exhibited the taste of Henry for childish shows in accordance with the predilections of the age.

An expedition was sent to invade France; part of Normandy was ravaged by the earl of Surrey; but it was one of those wretched proceedings in war, by which the people suffer, while neither party obtains any material advantage. One effect however appeared. The expenses of this warfare embarrassed the government; one of Wolsey's financial measures was a forced loan, which

excited many murmurs, though it failed to produce the required amount. The citizens of London, with much difficulty, avoided the necessity for each one openly declaring the amount he was worth, by consenting to attend Dr. Tonnys, an ecclesiastic employed by the cardinal to receive their own statements, privately handed to him at the Chapter-house of St. Paul's, paying at the same time a tenth part of the principal. What would be said now of such a measure?

A parliament was called, but the members were very unwilling to order the required supplies. Wolsey desired permission to be present, that he might "reason" with the members. By the advice of Sir Thomas More, then speaker, the cardinal was allowed to enter with all his pomp, and to urge that the sum of 1,200,000*l.* should be granted, to enable the king to make war against France. But it was previously arranged, that no debate should take place in his presence. In vain the cardinal called upon one and another of the members to speak; finding all obstinately silent, he was obliged to accept the ironical excuse of the speaker, that they felt abashed at his presence. He departed in much displeasure. The king was induced to interfere, with a display of that prerogative which he estimated so highly. He sent for an active member, and threatened that his head should be cut off, if the bill did not pass the next day. A considerable subsidy was then granted. This circumstance proves Henry's high estimate of kingly power, under the guidance of Wolsey, before he thought of dissolving his compact with Rome.

It is amusing to notice one complaint Wolsey alleged against parliaments, that any thing said or done in them, was immediately made known in every ale-house. What would he have said to the newspaper reports of the present day, by which speeches delivered in the House of Commons in the early part of the evening are read in print the next morning, in the public rooms of the most populous parts of the kingdom, two hundred miles from the metropolis!

An invasion of France under the duke of Suffolk in the following year, had but insignificant results, though at one time the English army advanced within thirty miles of Paris.

Another vacancy in the popedom occurred in 1523, when Wolsey was again disappointed by the devices of Charles.

The new pope, Clement vii., sought to appease Wolsey by giving him the appointment of legate during his life, which rendered him still more vainglorious. Clement also granted to Wolsey power to suppress some monasteries, which was followed by results very different from the anticipations of the pope.

The immediate object was to enable Wolsey to found colleges at Oxford and Ipswich, for the advancement of learning, by applying the revenues of some religious establishments of monks for that purpose. The Romish church thought thus to increase the number of its learned supporters, but it gave a precedent for that spoliation which the king afterwards carried forward.

Henry was gifted with another consecrated rose by the new pope; a splendid toy, with branches a foot broad, and a foot and a half in height! It was placed in a golden vase, filled with gold dust; some of the flowers were represented by jewels. Thus the strictest amity appeared to prevail between the king and the pope, but friendships based on earthly and even criminal grounds are fleeting, and soon pass away. The prophet warned the ungodly in his day; "Associate yourselves, O ye people, and ye shall be broken in pieces; and give ear all ye of far countries: gird yourselves, and ye shall be broken in pieces. Take counsel together, and it shall come to nought," Isaiah viii. 9, 10.

The campaigns of 1524 were distinguished by an important event. The duke of Bourbon, constable of France, the ablest general of that nation, after rebelling against Francis, was appointed commander of the imperial army. His defection proceeded from discontent, that the command of the van of the French army in pursuit of Charles in October 1521, had been given to the duke of Alençon, and from a claim to the estates of his deceased wife, being advanced by the queen-mother of France, Louise of Savoy. At the age of forty-two, she desired to become the second wife of Bourbon, who was twelve years younger than herself. Her hand being refused, she became his decided enemy, and the king at her instigation treated him with neglect and injustice. Turner has fully stated the circumstances, and pointed out the momentous results which attended the revolt of Bourbon. It was followed by large projects and combined efforts against France, by Henry of

England and the emperor Charles. These were ably planned; but Turner well remarks, that "as nations arise not, neither do they fall by human contrivances. It might amuse the infidel Frederic II. of Prussia 'to say that Heaven always befriends large battalions,' but no remark has been oftener confuted by both ancient and modern history, and even by his own. Something more than numbers or skill, or both united, are requisite for success." This observation is fully in accordance with the declarations of Scripture, and may remind us of the words of the shepherd David to the armed Philistine:—"All this assembly shall know that the Lord saveth not with sword and spear; for the battle is the Lord's, and he will give you into our hands." According to human calculations, France appeared for many years about to be overwhelmed, conquered, and divided: but in the decrees of Providence, that nation had a mighty part to perform during subsequent years; therefore the machinations of its enemies were disappointed. Seemingly casual circumstances can now be referred to, as disconcerting the best laid devices of man; this we shall continually have to remark in the eventful period under our notice. In the first instance, an apparently unimportant detention of the French king for a few days, on his way to Lyons, disconcerted the schemes of Bourbon and the confederate princes. It led them to make some efforts against the French forces in Italy, and to attempt an invasion of France from thence by Bourbon, while an English army acted on the north; but this plan was also unsuccessful. Francis drove back Bourbon, while Wolsey seems to have given temporizing orders, which rendered the proceedings of the English inefficient. It is unnecessary here to state the particulars of such a warfare.

Bourbon was still influenced by the desire for revenge, embittered by feelings of disappointed pride. Francis carried the war into Italy, where the contest was waged with renewed vigour. The pope favoured the French. For a short time brilliant success seemed to attend the ambitious schemes of the worldly-minded pontiff. An involved series of negotiations followed, during which, Wolsey again played his usual double part, till the English ambassador plainly told him that no reliance was placed on any statement he might make. But all these

plans were soon brought to a pause. The duke of Bourbon, at the head of the imperial army, fought and entirely defeated the French at Pavia, on February 24, 1525, when Francis was taken prisoner. He found himself captive to one of his own servants, whom he had treated with injustice; despised, and driven into exile! Such is the uncertainty of human affairs; such are the bitter lessons that kings and mighty men of renown often have to learn. The slaughter on both sides was considerable; not only the commonalty, but the higher ranks, had to deplore the proud and angry proceedings of their leaders. Among those who fell in this battle, or rather in the flight, was Pole, called the White Rose, the eldest surviving representative of the house of York, whose brother was afterwards distinguished as cardinal Pole.

New plans against France were speedily devised; but new intrigues also arose, to prevent the emperor and the king of England from subjugating that nation. These two powers were very jealous of each other. However, they planned an immediate invasion of France, for which a large sum was attempted to be levied in England. As direct taxation by parliament was no longer practicable, it was necessary to endeavour to raise it by the arbitrary requirements of commissioners. Warham remonstrated with Wolsey, at the expenditure vainly lavished; he urged the discontent excited by these proceedings, which was very general. We have a specimen of these complaints written by a contemporary, in Hall's *Chronicles*.

"The clergy said, that never king of England did ask any man's goods, but by an order of the law, and this commission is not by the order of the law; wherefore they said, that the cardinal and all the doers thereof were enemies to the king, and to the commonwealth. This infamy was spoken in preachings and every where. When this matter was opened through England, how the great men took it was marvel; the poor cursed, the rich repugned, the light wits railed; but in conclusion, all people cursed the cardinal and his co-adherents as subverters of the laws and liberties of England."

Wolsey strengthened these oppositions by his insolence. He openly cautioned the Londoners not to resist, lest it should cost some their heads; and told them it was better that some of them should

suffer from indigence, than that the king should not be supplied. Failing in the direct course, efforts were made to raise money by forced loans. In Suffolk and Norfolk the people arose in rebellion. The names of their leaders being demanded, the emphatic reply was, "Captain Poverty," and that he and his cousin Necessity had brought them to that pass!" The subject was fully discussed at the royal council. The king openly declared he would never ask any thing which might be to his dishonour, at once directing that a general pardon should be issued, and the exactions discontinued. He saw the extent of the threatening danger, and wisely withdrew before he was irrecoverably committed with his people. Henry threw the blame upon Wolsey; but the wily cardinal sought to have it believed that he had been the intercessor with the king in this matter, while by means of flatterers, and the devising of amusements, he contrived to keep on good terms with his monarch. The result of this affair was to hinder Henry from active warfare on the continent.

The captivity of the French king united the efforts of his people, while the successes of the confederates led to their disunion. Thus all their plans and negotiations ended without any very important effect, except a growing dissatisfaction between the emperor and Wolsey; the former not hesitating to speak openly against the latter. It was followed by a mutual consent to annul the treaty, which engaged Charles to marry the princess Mary, still a child. This state of affairs seems to account for a separate treaty of peace between England and France, stipulating for large pecuniary payments from the latter, but not requiring the territorial concessions previously demanded. To these terms Francis assented, without any intention of fulfilling them; a secret protest was made against the whole transaction, and privately entered on the state records. Such is the duplicity of worldly men, even in the highest stations. Henry was equally guilty of duplicity, when he afterwards sent ambassadors to congratulate Francis on gaining his liberty, but instructed them privately to urge him to break his treaty with the emperor, on the faith of which he had been liberated.

The crooked policy of Wolsey, with the difficulty of raising money, were not

the only causes of this conduct. The disposition of Henry was not warlike. He had been trained in the arts of peace; his delights were in festive displays and literary pursuits. He was not one of those princes

"Who, for the sake of filling with one blast
The post-horns of all Europe, lays her waste."

In his early days, however misled by surrounding courtiers and statesmen, Henry evinced a delight in the occupations of peace, then very unusual in princes. Yet this did not arise from pusillanimity, or averseness to martial exercises. He ever showed personal courage, and excelled in active and dangerous sports. The first literary characters of that day have left full testimony to this effect in their repeated praises of his pacific spirit. Though the defects in Henry's character were neither few nor small, he rose superior to the belief that there is real glory or substantial pleasure, from engaging thousands in mutual slaughter. With the stern ferocity of that age, he could issue mandates which involved much individual suffering, but he did not take delight in causing public troubles from the cruel results of warfare.

The terms imposed upon Francis by the emperor, by which the French king obtained his liberty in March, 1526, were severe. Wolsey then entered upon another series of negotiations to renew the warfare between the two princes. His aim was, that Henry should hold the balance of power, without enabling either of the contending monarchs fully to overcome the other. The pope was the great instigator of this renewal of hostilities, though he had previously expressed his decided belief, that a new war would seriously injure the papal power; and this proved another circumstance in the series of events by which a large part of Europe was freed from the bonds of the papacy. Both Clement and Wolsey now thought that their own objects would be better promoted by war than by peace; therefore, although professed ministers of the Prince of Peace, they did not hesitate to excite the nations to mutual slaughter. But thereby they brought down ruin upon themselves!

The emperor appointed Bourbon to command the army which advanced into Italy. Each of the three monarchs continued his intrigues and negotiations; but in the autumn of 1526, Bourbon marched southwards; his progress was

slow, but the pope continued to urge the confederation against the emperor. In the ensuing spring, the imperial army being clamorous for spoil, Bourbon marched his army to Rome, and took it by assault on Easter Sunday, May 5, 1527. He perished in storming the walls, but the city was sacked, and the inhabitants were subjected to the most cruel and atrocious sufferings. Pope Clement was taken prisoner, and insulted both by the reformed Germans and the irreligious Spaniards, exhibiting to all Europe a pope subjected to the common lot of conquered monarchs. The sufferings of the Roman citizens were unexampled; they continued for several months; but the papal power received a shock which it has not been permitted to recover, and this by the policy of monarchs devoted to its faith. Never since that day has the pope been enabled to support his fulminations efficiently by the strong arm of military force; he has been little more than a tool in the hands of one or other of the monarchs of the day, so far as temporal affairs are concerned.

Double negotiations were still carried on by England, or rather by Wolsey, with France and Spain, though both were aware of his duplicity. The events passing at Rome, induced him to declare against the emperor, and he prepared for a personal visit to France. He neglected not this opportunity for displaying his state. His setting off is thus described: "Then marched he forward from his own house at Westminster through all London, over London Bridge, having before him a great number of gentlemen, three in a rank, with velvet coats, and the most part of them with chains of gold about their necks; and all his yeomen followed him with noblemen's and gentlemen's servants, all in orange tawny coats, with the cardinal's hat, and a T and a C, for Thomas Cardinal, embroidered upon all the coats; as well of his own servants as all the rest of the gentlemen's servants; and his sumpter mules, which were twenty or more in number. And when all his carriages and carts, and other of his train, were passed before, he rode like a cardinal very sumptuously with the rest of his train on his own mule, with a spare mule and spare horse, trapped in crimson, following him. And before him he had his two great crosses of silver, his two great pillars of silver, the king's broad seal of England, and his cardinal's hat, and a gentleman carrying

his cloak-bag, which was made of scarlet, embroidered with gold. Thus passed he forth through London; and every day on his journey he was thus furnished, having his harbingers in every place before, which prepared lodgings for him and his train." This was not much more than the state ordinarily assumed by the proud cardinal.

A treaty was soon concluded, which arranged a marriage between the princess Mary and the duke of Orleans, with other articles intended to limit the influence of the pope, then still a prisoner in the emperor's power, constituting Wolsey the regulator of all ecclesiastical affairs in the countries under the dominion of Henry. But Wolsey had carried his diplomatic artifices too far: he was now subjected to the same secret negotiations he had employed against others. The Spanish monarch even caused him to be warned that the king of France was at this time negotiating secretly with Spain.

Turner says without hesitation, that ancient history, in all its details of dissimulation and falsehood, does not present any thing equal to the state transactions of the first kingdoms in Europe at that period. Let it be remembered that the popes were concerned in all these transactions; that it was under the sanction and tuition of the church of Rome, and in accordance with the principles it taught; and that the agents employed on all sides, were usually Romish ecclesiastics! The particulars of the events, briefly noticed in the preceding pages, fully show this. We shall hereafter find how different were the proceedings of the statesmen of Protestant England in the same century. Here then we behold Wolsey at the summit of his power, arbiter, as he fondly imagined, of the destinies of Europe; yet indulging in a show of childish pomp and display which could only bring down public scorn; and we cannot wonder that a man of his character should afterwards be entangled in his own devices. Of such it is written: "They encourage themselves in an evil matter: they commune of laying snares privily; they say, Who shall see them? They search out iniquities; they accomplish a diligent search: both the inward thought of every one of them, and the heart, is deep. But God shall shoot at them with an arrow; suddenly shall they be wounded. And all men shall fear, and shall declare the work of God," Psalm lxiv. 5—7. 9.

NECESSITY OF THE GOSPEL.

We are aware, that, in the present day, religion has numerous competitors for the honour of improving mankind; that civilization and law, political economy, and secular instruction, forgetting their total failure as a remedy for human misery during the thousands of years in which they had the world to themselves; forgetting, that however useful they may be in their several subordinate departments, their utility can never extend beyond those limits, but by their becoming the handmaids of that divine religion whose sphere is the universe and eternity; and forgetting that the moral progression of society of late is owing, not to their influence, but to the operation of that religion:—forgetting these things, they flatter themselves, that could they but be left to work alone, they should need no higher aid in order to renovate society, and make the world happy. But if the malady of sin has fallen upon the moral and immoral part of our nature, they possess not one quality of a remedy. If to leave the heart untouched, is to leave the man unhealed, they can have no pretension whatever to be regarded as a balm. At best they can but heal the hurt of the daughter of a people slightly, saying, Peace, peace, when there is no peace. At best they are but palliatives; but like most other mere palliatives, they subsequently aggravate the disorder they pretended to cure.

Science, for instance, taken by itself, has no tendency whatever to moral improvement. Such improvement can only result through the medium of *conscience*; by the agency of something which shall appeal to our *hopes and fears*; by a moral influence.—But what connexion is there between the mechanical sciences and morality? How can a vicious heart be cured by lectures on geology? If no one expects to learn astronomy by studying botany—if no one expects to learn it even by studying religion—why should any one expect to learn religion, or to be able to dispense with religion by studying science? The instruction of a community in worldly science can, at best, but multiply its *mental and social resources*, and thus correct its taste for some of the grosser forms of sensuality. But ask ancient Greece and Rome, and modern France, the direction in which it tends, unguided by revelation, and you will find that it leads through atheism to destruction.

However simple the early character of a people may be while struggling to establish their political existence, survey the whole compass of history, and say, in what instance has a progress in arts, and science, and commerce, and attendant wealth, unaccompanied by religion, failed to increase the luxury and licentiousness, the arrogance and selfishness, of a people, and thus to seal their doom? Investigate the claims of civilization, and you will find that it is but just beginning to ascertain them itself. The most distinguished writer on civilization of the present day* commences with the inquiry, which lies at the very basis of the subject before us, “Is society formed for the individual, or the individual for society?” and pronounces that one of the greatest philosophers† has thus resolved the question: “Human societies are born, and live, and die upon the earth; there they accomplish their destinies. But they contain not the whole man. After his engagement to society, there still remains in him the more noble part of his nature. We have each a separate and distinct existence, are endowed with immortality, and have a destiny higher than that of states.” Yes, civilization and government must disclaim the power of reaching the soul. All they can accomplish, at best, is to restrain the eruption of its disease when it endangers the social health, and to develop other counter-acting qualities likely to maintain that restraint. This is their *best*. History, alas, finds it abundantly easier to furnish illustrations of their *worst*; to show us that human government, apart from the influence of religion, aye, and in defiance of that influence too, can itself cater for the most morbid appetites of a people, up to the very point of social danger; that it can itself legalise immorality, and sell the sabbath, and open a thousand hippodromes, provided the people will be content with destroying themselves, without destroying it; that it can persist in bartering away the morals, the rationality, the very bodily health of hundreds of thousands of its subjects, provided the sale of the liquid fire that inflicts these evils continues to swell the revenue.

Well, then, may we appropriate the language of the prophet, and inquire, “Is not the Lord in Zion? is not her King in her? Why have they provoked me to anger with strange vanities?” To

* Guizot.

† De Royer Collard.

think of making any expedient of human device a substitute for the gospel, is the highest provocation which man can offer or God receive. Did you consult only the *temporal* welfare of the community in which you dwell, the speediest and most effectual method of promoting even *that*, would be to give them the gospel. It moralizes every society which it enters. Even when it does not convert a people, it arrests the progress of vice, denounces oppression, awakens compassion for the wretched, asserts the supremacy of law, elevates the public standard, and thus lays a foundation for civil improvement and social happiness. But you profess to design their *spiritual* welfare, and for this the gospel is the *only* means. Here there can be no competition, no rival, no question. Compared with its wisdom, every other system is foolishness; for it is the wisdom of God. Compared with its power to sway the heart, all other strength is weakness; for it is the power of God. Its light alone can pierce the darkness of the soul. Its influence alone can break the chains of sin, and turn the heart, the house, the city, once devoted to Satan, into a habitation for God through the Spirit. But the gospel can do this. It taught chastity at Corinth, humility at Athens, humanity and holiness at Rome, and converted even the jail at Philippi into a Christian church. And what it has done it can still repeat. Its Author is the appointed Healer of a diseased and a dying world: only let its saving health be diffused, and like a heavenly current of vital air, it will sweep over the scene of spiritual sickness, imparting life, and health, and universal happiness.—*Harris.*

LEAVES.

THE endless variety of the works of God is very strikingly illustrated in the diversity of forms and structure in the leaves of plants.

Leaves are no less indispensable to plants, than lungs are to animals, as they are well ascertained to perform similar functions in preparing the sap that arises from the soil through the roots. This will be better understood by adverting to the functions of the animal lungs in preparing the blood for the nutrition of the body, when the beautiful and beneficial contrivances of the great Creator, for this purpose, will be manifested. When the food is digested, and the di-

gested portion is carried through the appropriate vessels into the veins, to mingle with the blood previously formed, it afterwards goes forward to the lungs, to be spread minutely over their surface, that it may be exposed to the air taken in by breathing.

It is worthy of remark, that the new blood derived from digested food, and the previously formed blood, when mingled together and spread over the lungs, are of a dark purplish colour; like that drawn from the arm in the surgical operation of bleeding; but after this blood is exposed to the air in the lungs, it changes to a bright crimson colour, and is taken up by the arteries to be circulated through every part of the body by the instrumentality of the heart.

The air which performs this change in the blood, seems to act in part mechanically and in part chemically. It acts mechanically in taking up a portion of the dark-coloured substances in the purple blood, to be carried out of the body by the returning breath; and it acts chemically in parting with a portion of one of its constituents termed oxygen to the dark blood, a principle which has the effect of brightening the colour and changing the quality of the blood.

For a reason which will presently appear, it is necessary to remark, that all this action of the air, and the blood in the lungs, and the changes consequent thereupon, take place in the dark, no light being able to penetrate into the animal lungs during the process. The light indeed would so far interfere with the effect, that no oxygen would pass into the blood, and none of the dark matter called carbon by chemists would be given off, and carried away by the returning breath. This indeed is one of the chief differences between the leaves of plants and the lungs of animals, as will be immediately evident.

The sap and pulp of plants by which they are nourished, as animals are sustained by means of blood, are produced and undergo very different changes from those of blood. There being no stomach in plants to digest food, the soil seems to act the part of a stomach, and the tips of the roots which take up the sap are so admirably constructed, that they only take up the sort of moisture adapted to constitute sap, namely, rain-water mingled with the manure or other nutritive materials in the soil.

As there is no stomach in plants to

digest the sap, no more is there any heart to circulate the same throughout the plant; and it is not well understood even by the best informed botanists, in what manner this circulation is effected, unless it be, that the sap rises through the tissue of the plant, particularly through the inner layers of the bark, and between the annual rings of the wood in some similar way to that in which water spreads through blotting-paper, or rises up through a piece of lump sugar.

In whatever way the sap is thus conveyed up the stem of the plant, it arrives at length at the leaves, and is spread out by means of the fine net-work of vessels on their upper surface being only covered by an extremely thin and delicate membrane, more or less tinged with yellow. Being thus spread out on the upper surface of the leaf, it is acted upon by the air of the atmosphere, which produces in it changes no less important than it does on the animal blood spread out on the surface of the lungs,—changes, however, which depend in a great measure on the coldness or warmth of the air; but much more on the presence or absence of light. When the air is warm, and the sun shining on the leaf, a large portion of the water of the sap is exhaled, and the sap which remains is consequently rendered thicker by this loss of its water; but so far from any of the darker coloured substance, or carbonaceous matter of the sap being carried off, as it is from the blood in the animal lungs, a portion of the carbon in the air is imparted to the sap; while oxygen, contrary to what takes place in the lungs, is given off. The sap is thus rendered both of a thicker consistency, and much more carbonaceous quality than before; and according to some eminent authorities, is not exactly black as it appears, but of a dark blue colour.

If this latter statement be correct, as it seems to be, the green colour of the leaves may easily be accounted for; because as yellow and blue produce green, so the yellow membrane of the leaf being transparent, and the dark blue carbonaceous sap being seen through it, will of course cause it to appear green in the same way as a blue flower when looked at through a yellow glass will appear green.

The sap, after it has undergone these changes, passes to the under side of the leaf, and is returned through the foot-stalk to nourish the branches, the stem, the root, and other parts of the plant, in the same way as the blood is passed

back by arteries from the lungs to the heart, to be sent to all parts of the animal body.

When the weather is cold and damp, or during the night, the changes effected in the leaf are very different. In the dark, the effects are very similar to what takes place in the animal lungs, that is, oxygen is abstracted by the leaf from the air, and carbonaceous matter given off, a circumstance which must tend to deteriorate the air for breathing; and hence the evil of keeping plants in flower-pots at night in a bed-room.

The under surface of the leaves is not adapted to effect the proper changes in the sap; and hence it is, if a leaf be forcibly turned with its underside to the light, and held in this position, that its functions are destroyed. In the same way, if a whole plant be kept in the dark, or without sufficient exposure to sunlight for the leaves to change the sap, the dark blue carbonaceous matter cannot be produced; and consequently, the leaves do not appear green, but yellow, or whitish yellow, the colour of the exterior membrane.

Light being thus so indispensable to leaves, in order that they may perform their functions in a healthy manner, Providence has so constituted plants, that when they are accidentally placed out of the light, they bend or turn themselves in the direction in which it falls; and even in a dark cellar, if there be the smallest chink for the admission of the least glimmering of light, a plant accidentally placed there, such as a potatoe, will send out its leaves towards the chink, and will extend shoots sometimes of the most extraordinary length towards it, that the leaves may be able, by means of the light, to effect the proper change in the sap.

The meditative reader may here be apt to ask, seeing that leaves are green, when their functions are duly performed, how some leaves come to be partly green, and partly white or yellow; in plants which are termed variegated, as in the golden laurel, (*Aucuba Japonica*), the milk thistle, (*Carduus Mariana*), and the various sorts of variegated holly, elm, and other shrubs and trees with spotted leaves. This circumstance of the spots in leaves has been recently investigated with his usual ingenuity by M. Dutrochet, of Paris, who has discovered, that in all spotted and variegated leaves, the white or yellow portions are not con-

structed like the green portions, but consist of air cells, having nothing but the upper and under membranes, with no intermediate sap nor pulp to produce the green colour, in the same way as the human hair, when it becomes white or grey, is destitute of the dark colouring matter in its interior.

It will follow from what has thus been said respecting the functions and colours of leaves, in the case of deciduous shrubs and trees which shed their leaves in the autumn, that their yellow colour is caused by a deficiency in the quantity of sap, the proportions of which have so great an influence on the colours, that it may be remarked by the meditative observer, not only in autumn, but in spring and summer. In spring, the young leaves just bursting from the bud, and for some time after, are much paler than they afterwards become, owing to the small supply of sap, or probably also to the light not being intense when the days are still short. This paleness is peculiarly striking in the leaves of the lime tree, (*Tilia Europæa*), and the larch, (*Pinus Larix*), giving them a freshness and beauty which all must have admired during the first few weeks after they expand from the buds. Soon, however, this pale colour darkens, owing no doubt to the increased supply of sap, or to the more efficient change in this sap caused by the greater length of the days, and the greater power of the sun. As the summer advances, these causes operate more and more till the colour of the leaves is changed to a very dark green, approaching to black; and the sombre, dingy appearance this gives to the lime and the larch trees contrasts so strongly with the fresh colour they put on in spring, that they can scarcely be recognised as the same trees.

When the light, as has thus been shown, has so powerful an effect upon the colours of leaves, it will follow, that in tropical countries, where the sun-light is still more intense than it is in our temperate climate, the colours of the leaves will be very dark. Accordingly this is found to be the case; the leaves of the trees in hot countries being all of a dark blackish green, giving the woods and forests a very melancholy appearance. Even our common English oak, (*Quercus Robur*), when transplanted into such climates as in the island of St. Helena, has its leaves not only rendered much darker by the greater intensity of

the light; but they become evergreen, like all tropical trees, and do not shed their leaves in the autumn as they do in Europe.

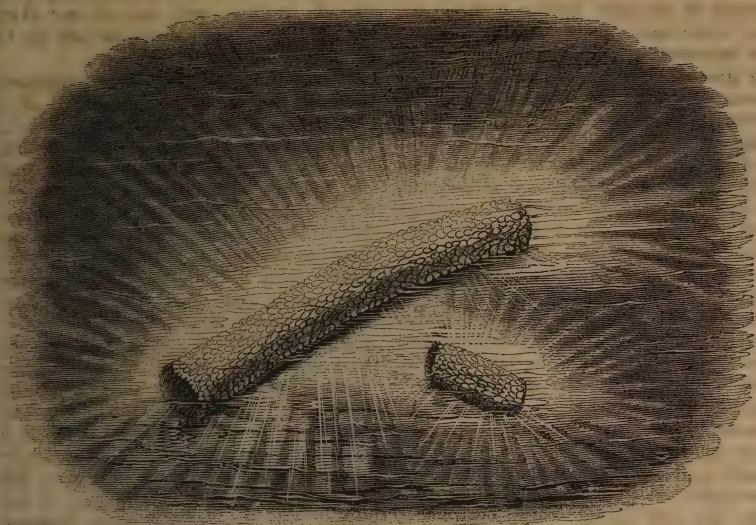
When the sap ceases to be supplied through the trunk and branches of a tree to the leaves, these first fade in colour, and after a time become detached, and fall off; the attachments which held the footstalk to the bark giving way, as if it had been compressed by some force acting on the bark. That it is not the mere withering of the leaves which causes them to fall, is proved by the well-known fact, that when a branch with its leaves is broken from a tree, the leaves so far from falling off, as they do at the natural fall of the leaf, adhere more firmly than when they are fresh and living on the tree. Their colour also is not the same when withered on a broken branch, as when they fall naturally from the tree: for, in the first case, the sap is dried up in the leaf; and, in the second, the sap is in a great measure altogether wanting.

It would not be difficult to write a volume on the various circumstances connected with leaves, so fertile is every individual portion of the works of creation in interesting facts, and edifying inferences; and a contemplative botanist might spend a large portion of his time in meditating on their wonders.

J. R.

"ONLY BE FAITHFUL."

BENGEI's principle was, I must work while it is day; I do what my hand findeth to do, without much caring what it is, provided my eye and heart are aiming at what is best in the end. And then, though the *what*, the *how*, the *why*, the *wherefore*, or the *whereunto*, may be all along unknown to me, God knoweth how to turn all to his own holy purposes. "Only be faithful" is my motto; even though it concern but a jot or tittle. Indeed some of the most important exegetical discoveries, or their still more important results, are made by conscientiously attending to apparent minutiae. One day's feeble work of ours may be as much with God as that of a thousand years; so greatly to our account can he make all things turn, provided we honour him by aiming always at his glory.



THE PYROSOMA.

ON THE LUMINOUS APPEARANCE OF THE SEA.

ONE of the most interesting and beautiful phenomena presented by the sea, is the occasional luminosity of its surface; a luminosity which, although occurring in northern latitudes, especially during the hot months of summer, is far more brilliant in the intertropical ocean, where the waves, like waves of molten metal, roll around the vessel in her course, and a lurid track marks the line of her passage. All who have seen this spectacle, describe it as truly magnificent; indeed the fainter luminosity of the waves, (as we have ourselves seen it,) on our own shore, flashing as they roll upon the pebbly beach, or gilding the oars of the boat, itself scarce visible amidst the darkness of the night, (for it is only by night that this effulgence is manifest,) produces a pleasing effect, leading the contemplative mind to a consideration of the wonders of that ever-moving ocean, in whose depths are the wrecks of "ten thousand royal argosies," "pale glistening pearls, and rainbow-coloured shells," and the myriads of living things that make the liquid element their home. But far more glorious must it be to see all around, far as the eye can stretch, a flood of fire, a sea of glowing water,

from which, the vessel ploughing on her course, throws up the spray, falling like a shower of stars to be lost in a boundless ocean of effulgence. A talented writer, whose opportunities of observing this sublime spectacle have been very frequent, gives us the following interesting details: "As the ship sails with a strong breeze through a luminous sea on a dark night, the effect then produced is seen to the greatest advantage. The wake of the vessel is one broad sheet of phosphoric matter, so brilliant as to cast a dull pale light over the after part of the ship; the foaming surges, as they gracefully curl on each side of the vessel's prow, are similar to rolling masses of living phosphorus; whilst in the distance, even in the horizon, it seems an ocean of fire, and the distant waves breaking, give out a light of inconceivable beauty and brilliancy. Sometimes the luminosity is very visible without any disturbance of the water, its surface remaining smooth, unruffled even by a passing zephyr; whilst on other occasions no light is emitted unless the water is agitated by winds, or by the passage of some heavy body through it. Perhaps the beauty of this luminous effect is seen to the greatest advantage when the ship lying in a bay or harbour in tropical climates, the

water around has the appearance of a sea of milk. An opportunity was afforded me when at Cavité near Manilla, in 1830, of witnessing, for the first time, this beautiful scene: as far as the eye could reach over the extensive bay of Manilla, the surface of the tranquil water was one sheet of this dull pale phosphorescence; and brilliant flashes were emitted instantly on any heavy body being cast into the water, or when fish sprang from it, or swam about: the ship seemed, on looking over its side, to be anchored in a sea of liquid phosphorus, whilst in the distance, the resemblance was that of an ocean of milk. The night to which I allude, when this magnificent appearance presented itself to my observation, was exceedingly dark, which by the contrast gave an increased sublimity to the scene." To read by this phosphoric light "is possible, but not agreeable; and on an attempt being made, it is almost always found that the eyes will not endure the peculiar light for any length of time, as headaches and sickness are often occasioned by it."

The causes to which the luminosity of the sea is owing, have, from time to time, excited much speculation among naturalists, and various experiments have been made in order to the elucidation of this phenomenon. After all, however, the solutions of the problem have been based rather on mere hypotheses, than on fixed and solid data, not that no facts have been ascertained, bearing upon the question, but that too much stress has often been laid upon them. It is not, we conceive, to one and the same cause that the luminosity of the sea is invariably to be attributed; indeed it would positively appear that several causes alike operate in the production of this phenomenon, in different situations, and under different circumstances. To a consideration of these causes, we purpose to call the attention of our readers. The light of the sea, as displayed during the night, appears, according to the accounts of all who have witnessed it, to be phosphorescent; its appearance precisely resembles that given out by a piece of phosphorus in the dark; it has the lurid hue of this substance, which every person must have remarked. Now we know that this luminosity is not produced by solid phosphorus alone, but that fluids containing phosphorus in their composition, also gleam with a pale bright lustre. There are, however, other sources

of phosphorescent light, or light regarded as connected with this principle. Many of the lower tribes of animals are luminous; they possess the power of giving out light, either from the whole or some portion of their bodies; of the latter case, insects furnish us with many interesting examples. The glow-worm (the wingless female of a winged beetle, *lampyris noctiluca*) is known to all. The fire-flies of South America, and the West India Islands, genus *elater*, (for a sketch and account of *elater noctilucus*, see Weekly Visitor, 1835, page 146,) are celebrated for their brilliancy. Among the *myriapoda*, a very common centipede, (*geophilus electricus*), which may be often seen on banks and grass plots at night, its season of activity, glows with phosphorescent radiance. Among the *vermes*, (worms,) the marine species termed *nereis noctiluca* has been long known to be capable of giving out light; nor is the common earth worm utterly destitute of this faculty even in our climate; we have ourselves observed it luminous, and we have authority for stating, that in South Africa, it is decidedly so.

Among the *acalephæ*, (sea nettles,) the *medusa* and *beroe*, and among the zoophytes, the *pennatula* (sea-pen) and *sertularia* are vividly phosphorescent. Many of the *crustacea*, (crabs, etc.) are also luminous, as the *cancer pulex*, of Linnæus, and the *cancer fulgens* of Sir Joseph Banks. "In a species of *cancer* observed by Captain Tuckey, in the gulf of Guinea, the luminous property resided in the brain, which when the animal was at rest, resembled a most brilliant amethyst about the size of a large pin-head, and from this there darted, when the animal moved, flashes of a brilliant silvery light." Numerous animalcules are eminently brilliant, giving a phosphorescent radiance to the water in which they abound. Nor are fishes, as it would seem, apart from the tribes endowed with the power of emitting light. The dorado, the mullet, the herring and the sprat, are examples in point. The *sparus chrysurus*, an inhabitant of the seas of Brazil, is said to be luminous in such a remarkable manner, that when a few individuals are swimming in company they emit so much light, that in a dark night a person may see to read by its aid. "But considerable suspicion," observes Dr. Fleming, "may be entertained on this subject, whether the light is emitted by the bodies

of fish themselves, or by the number of minute parasitical animals which adhere to the surface of the skin."

We have yet to mention the *pyrosoma*, (one of the *tunicate mollusca*,) the effulgence of which has long attracted the attention of naturalists. To this curious animal we shall revert more particularly hereafter. There is another source of this phosphorescent light, which remains to be noticed; we allude to certain animal matters in a state of decomposition. Fishes, and lobsters, etc. in an incipient stage of putrescence, are, as is well known, luminous in the dark; but a question here presents itself—To what is their luminousness owing? Is it, that some chemical process, connected with decomposition, evolves phosphorescent light, or is productive of phosphoric matter? We think it is. The light seems to crawl and flit about the object, as it does on a board rubbed with a portion of phosphorus and placed in the dark; in such a case, we may observe the unsteadiness of the illumination, which appears as if irregularly traversing the surface. When fish are steeped for a certain time in water, the fluid becomes luminous. Dr. Fleming observes that a heat of 118 degrees, destroys in a great measure this property, and adds, "The luminousness appears to be caused by the infusory animalcules with which such water abounds." That animalcules may and do exist in vast numbers in such water is not to be doubted, but that the luminousness of the water depends upon their presence by no means follows; nor can we attribute the peculiar luminousness of putrescent fish or lobsters not immersed in water, to this cause. At all events, the fact is undeniable, namely, that the decomposition of certain animal substances is accompanied by phosphorescent effulgence.

Now, let us, having thus briefly stated the sources whence this peculiar or phosphorescent light is evolved, endeavour to see if any, and which of them, are connected with the occasional luminous condition of the ocean. Father Bourzes, in a paper "concerning the luminous appearance observable in the wake of ships in the Indian seas," (see *Philos. Trans. Abridg.*, vol. 6, page 53,) notices the occasional milky appearance of the water, with luminous particles easily distinguishable on it: these, he adds, were not all of the same figure; some were as large as stars, some were

mere points, some looked like globules of a line or two in diameter, others like globes as large as one's head. "Not only the wake of a ship," he observes, "produces this light, but fishes also, in swimming, leave behind them a luminous track, which is so bright that one may distinguish the size of the fish, and know what species it is. I have sometimes seen a great many fishes playing in the sea which have made a kind of artificial fire in the water, that was a very pleasant sight; and often only a rope placed crosswise, will so break the water that it will become luminous. If one take some water out of the sea and stir it about ever so little with the hand, he may see in it an infinite number of bright particles. Or if one dip a piece of linen in sea water and twist or wring it in a dark place, he will see the same thing, and even if it be half dry. When one of these sparkles is once formed, it remains a long time; and if it fix upon any thing that is solid, as on the side or edge of a vessel, it will continue shining for some hours together. It is not always that this light appears, though the sea be in great motion, nor does it always happen when the ship sails fastest; neither is it the simple beating of the waves against one another that produces this brightness, as far as I could perceive; but I have observed that the beating of the waves against the shore has sometimes produced it in great plenty; and on the coast of Brazil, the shore was one night so very bright, that it appeared as if it had been all on fire. The production of this light depends very much on the quality of the water; and if I am not deceived, generally speaking, I may assert, other circumstances being equal, that the light is largest when the water is fattest and fullest of foam: for in the main sea the water is not every where equally pure, and sometimes linen dipped into the sea is clammy when it is drawn up again. And I have often observed, that when the wake of a ship was brightest, the water was more fat and glutinous, and linen moistened with it, produced a great deal of light if it were stirred or moved briskly." Now, we have here to observe that fluids containing phosphorus, or the water in which fish are steeped, have their luminousness greatly increased by shaking the vessel containing them; such is the property of all phosphorescent fluids. But what was the fat or glutinous matter, alluded to by Bourzes, with

which the water of the sea was impregnated, and to which he regarded its luminousness as owing? We strongly suspect, to the presence of putrescent animal matters; and in a paper, entitled, "Experiments to prove that the luminousness of the sea arises from the putrefaction of its animal substances," by J. Canton, M.A.F.R.S., (See Phil. Trans. Abridg. vol. 12, page 680, A.D. 1796,) we think that our views will be confirmed. His experiments are very interesting.

"Ex. 1. Into a gallon of sea water in a pan about fourteen inches in diameter, Mr. C. put a small fresh whiting, June 14th, 1768, in the evening; and took notice that neither the whiting nor the water when agitated gave any light. A Fahrenheit's thermometer in the cellar, where the pan was placed, stood at 54 degrees. The 15th, at night, that part of the fish which was even with the surface of the water, was luminous, but the water itself was dark. Mr. C. drew the end of a stick through the water from one side of the pan to the other, and the water appeared luminous behind the stick all the way, but gave light only where it was disturbed. When the water was stirred, the whole became luminous and appeared like milk, giving a considerable degree of light to the sides of the pan that contained it, and continued to do so for some time after it was at rest. The water was most luminous when the fish had been in it about twenty-eight hours, but would not give any light by being stirred after it had been in it three days." We may here pause to note, that the last fact seems to militate against the light being occasioned by animalcula, as they would have continued to live and multiply in this congenial fluid, and consequently kept up its luminousness to an indefinite period.

"Ex. 2. Mr. C. put a gallon of fresh water into one pan, and a gallon of sea water into another, and into each pan, a fresh herring of about three ounces. The next night the whole surface of the sea water was luminous without being stirred, but much more so when put in motion, and the upper part of the herring which lay considerably below the surface of the water was very bright. The fresh water was quite dark, as was also the fish that was in it. There were several very bright luminous spots on different parts of the surface of the sea water; and the whole, when viewed by the light of a candle, seemed covered with

a greasy scum. The sea water continued luminous to the seventh night, but the fresh water never acquired a luminous character, nor the fish in it."

A third experiment was made with artificial sea water, (a solution of common salt, of due strength) and with water made into very strong brine. In the artificial sea water, the usual effects of luminousness were produced by a herring put into it; but in the strong brine, no such effects were produced, and the fish when taken out on the seventh night was firm and sweet.

It is a very remarkable fact that a weak solution of salt (or sea water which contains about four ounces of salt to seven pints) hastens putrefaction. This discovery was first made by Sir John Pringle in 1750. A strong solution of salt, as we know, prevents it; hence, the fish kept in fresh water, Mr. C. found to be sweeter than that put into sea water, as in the second experiment.

Mr. C. adds a remark to his experiments, namely, "That though the greatest summer heat is well known to promote putrefaction, yet twenty degrees more than that of the human blood seems to hinder it: for putting a very small piece of luminous fish into a thin glass ball, water of the heat of 118 degrees destroyed its luminousness in less than half a minute; which, on taking out of the water, it would begin to recover in about ten seconds; but was never after so bright as before." It is well known that meat to keep at all in hot weather must be cooked, or in other words, submitted to a high temperature.

The observations of Father Bourzes, combined with the experiments of Mr. Canton, gives us a clue to the luminousness of the sea. It is chiefly, if not always, in summer, or hot weather, that this phenomenon is observed; in the water of the ocean, there is no lack of animal matter, every drop has its inhabitants: of the myriads of fishes, articulata, mollusca, etc. imagination cannot conceive an adequate idea, and death reigns in the waters, as well as on the land. To say more on this head is useless.

But is it to the decomposition of its animal substances that the sea in all cases owes its luminous appearance? Certainly not; but this is probably the most extensive and prevailing cause. However, it is doubtless also to be often attributed to the presence of dense

shoals of luminous marine animals spreading over a greater or less extent of surface. Of these animals the *pyrosoma* seems to be that most usually productive of the phenomenon in question. Collected in shoals, often covering miles of the ocean, and consequently in number beyond human calculation, these animals illuminate the gloomy deep with beaming radiance. Some idea of their numbers, however, may be formed from the following account, in Mr. G. Bennett's narrative of his "Wanderings, etc."

"On June 8, being then in 00° 30' south, and longitude twenty-seven degrees five minutes west, having fine weather, and a fresh south-easterly trade wind; and range of thermometer being from seventy-eight to eighty-four degrees; late at night the mate of the watch came and called me to witness a very unusual appearance in the water, which on first seeing, he considered to be breakers. On arriving upon the deck, this was found to be a very broad and extensive sheet of phosphorescence, extending in a direction from east to west, as far as the eye could reach; the luminosity was confined to the range of animals in this shoal; for there was no similar light in any other direction. I immediately cast the towing net over the stern of the ship, as we approached nearer the luminous streak, to ascertain the cause of this extraordinary and so limited a phenomenon. The ship soon cleaved through the brilliant mass, from which, by the disturbance, strong flashes of light were emitted; and the shoal (judging from the time the vessel took in passing through the mass) may have been a mile in breadth: the passage of the vessel through them increased the light around to a far stronger degree, illuminating the ship. On taking in the towing net, it was found filled with *pyrosoma*, which shone with a beautiful pale greenish light. After the mass had been passed through, the light was still seen astern, until it became invisible in the distance; and the whole of the ocean then became hidden in the darkness as before."

Other instances are also detailed of a similar nature; and Mr. G. Bennett observes, that after removal from the water the light of the *pyrosoma* soon subsides, but may be renewed by moving the animal about, for some time longer. Our readers will not be displeased to

have a detailed account of this singular and interesting animal.

The *pyrosoma* is a molluscous animal, and consists of a simple semi-transparent gelatinous tube, rather larger at one end than at the other. In size and length this tube varies in different species; of those before us, some are four, others barely one inch long. The tube itself is hollow, with a distinct aperture at the larger end, and also at the opposite end; but that of the latter is smaller and contracted. The substance of the tube is not homogeneous, but is dotted all over with granulations, or small buds, closely set together in the substance of the gelatine: these examined minutely will be found to have open mouths; they are in fact each distinct animals, so that a single tube is made up of an aggregate of beings cemented as it were together; a condition of organic life occurring in the zoophytes. According to the observations of M. M. Audouin and Milne-Edwards, these beings are at first free, and live and swim independently of each other, being conglomerated into a mass only at a certain epoch of their existence. In this condition, the *pyrosoma* swims on the sea by the combined contractions and dilations of the aggregate of individuals which enter into its composition. Several species are described, as *pyrosoma atlanticum*, *pyrosoma elegans*, *pyrosoma giganteum*, etc.

Enveloped in a flame of bright phosphorescent light, gleaming with greenish lustre, the *pyrosoma* presents a most brilliant spectacle: when quite at rest, however, the light is but sparingly given out, increasing when the water in which it floats is agitated, or when the animal is taken into the hand. A shoal of these animals not only illuminates the sails of a vessel; but will even permit a book to be read near the windows of the stern cabins, and enables the sea-birds which hover around, to search for their finny prey. The splendour of the *pyrosoma* fades and vanishes with death, the general colour being then a dull yellowish white. We have given a figure of two species, which, in conjunction with the above description, will convey an accurate idea of the appearance of these animals. See the engraving on page 177.

From what has been said, our readers will collect enough to discover that the luminousness of the ocean is not owing to one, but to various causes; that the

paler but more extensive effulgence of its waters is generally to be attributed to putrescent animal substances, which render them glutinous or clammy, as Father Bourzes expresses it; while the more brilliant but defined illumination, spread in patches or long lines, is produced by masses of luminous animals, and chiefly by the *pyrosoma*. M.

THE EMPEROR OF CHINA AND HIS COURT.

IN China, the emperor is at the head of government, with unlimited powers. It would be futile to enumerate his privileges; for he can act at his pleasure, and no one dares to gainsay him. The only checks on his power are old customs, and public opinion. The former he must always follow, and the latter he endeavours as much as possible to turn to his account.

The principal functions of this august personage consist in giving on every fifth day an audience to the mandarins. Here we see all the highest dignitaries of the empire, with the princes of the blood, prostrate themselves before the great monarch, scarcely daring to uplift their eyes. It is not even necessary that he should be present; thus, the honours rendered to his person, are transferred to a girdle, and a yellow screen, bearing the superscription of Shing, (holy,) or Wan-shwuy, (ten thousand years—a similar expression to *Vive l'Empereur!*) These audiences, however, are merely ceremonial, no state affairs being transacted at them. They are most splendid at the new year, or any other festival; but the emperor does not always deign to visit them. The state robe which he wears on these occasions, consists of yellow silk, with large black circles, and embroidered with dragons of nine claws, the Imperial emblem, like the eagle of the Romans. His cap resembles that of other mandarins, but it has a more brilliant knob of gold, and is also adorned with large pearls.

State affairs are transacted in private audiences, to which only the members of the council are admitted. The reports having been previously prepared, the emperor merely throws a glance at them; or, if they are of importance, writes his answer with the vermilion pencil, in as few characters as possible. We are not aware that regular debates take place before him, or that he himself proposes

questions, asks verbal advice, and decides disputed points, by the majority of voices. From the whole tenor of the replies, however, we should conclude, that the *ipse dixit* of the monarch settles every affair; the ministers remaining mute. Kanghe, who wished to introduce a more rational system, and elicit the opinions of his councillors, introduced debates, and even allowed his statesmen flatly to contradict him. Keên-lung, in this respect resembled his grandsire, but he could not bear that any one should possess greater wisdom than himself. The result of these consultations is submitted to clerks, who draw up the proclamations and edicts, and post up extracts, that the printers of the daily gazette may copy them. This paper contains nothing but government ordinances, the reports to the emperor, and his answer, either wholly or in part, and a detail of his own measures. It is the only vehicle possessed by the government for rendering its actions public, not indeed to the people, but to the mandarins. From hence alone the accounts from authority of what is going forward can be obtained; and, though the same spirit of misrepresentation pervades it, as pervades other public documents, it is the best account we possess.

These various edicts, proclamations, rescripts, orders in council, promotions, etc. bear different names according to their contents, with which, however, we do not intend to trouble the foreign reader. The most striking amongst them are the exhortatory edicts, in which the emperor admonishes the world to become virtuous, and turn to righteousness. It is in them we discover the paternal feelings which dwell in the monarch's breast. These papers are generally very long, and contain the most excellent maxims drawn from the works of the best authors.

Only two emperors of the present dynasty, namely, Kanghe and Keên-lung, have taken an active part in the administration, but these were frequently present at the council board. The last two monarchs do not appear to have had capacity equal to it. There have been from time to time very influential minions, who transacted business in the emperor's stead. At present it is said, that even the young empress and her creatures have a decided influence in state affairs, and direct them according to their will. Much difficulty, however, is not attached to the

transaction of such important business. Every thing is done in a certain manner, which never varies, unless changed by intrigue. The reports are drawn up in a prescribed form, and the answer must be according to established rules. All the higher officers of the tribunals are responsible for the correctness of their respective papers, and the ministers are so much at home in the beaten track, that they can seldom fail to propose the right answer. If that monster, intrigue, had not invaded even the palace of Heaven's Son, the whole business of the cabinet might be very ably performed by a calculating apparatus, which never fails to work out the sums. Some Chinese genius may perhaps hit upon this expedient, and we shall then have a ministerial machinery,—an amazing improvement in politics, and the only thing wanting in this enlightened age.

On important occasions, the emperor summonses the presidents and vice-presidents, who are thoroughly conversant with the affairs on which he seeks their counsel; and having fully investigated them, he deposes one or more officers to execute his orders. The messengers he sends to the provinces, either to examine or settle matters, are men who possess his confidence in a very high degree. If he dispatches a general either to quell a rebellion, or to wage war on the frontiers, it is with the express order to conquer and tranquillize; defeat, even if justifiable, is followed by disgrace, or even punished with death. Officers thus honoured by an imperial commission, though of the lowest rank, are on a par with the highest functionaries. The court swarms with minions, who live upon terms of great intimacy with their master, and are employed as spies under the name of aid-de-camps, clerks, and companions in the high courts of the provinces. They correspond directly with the sovereign, and execute his private orders. Nothing therefore could escape his knowledge, if they were not open to bribery, and too cunning to neglect their own interests.

One of the most important affairs is the appointment of officers. The emperor has retained to himself the prerogative of sanctioning the choice of the board intrusted with the care of recommending them. The higher functionaries he nominates himself, and they therefore preface their titles by *Kin-ting*—imperial commission. The governors of provinces

keep a book, in which the merits and demerits of their inferiors are carefully marked down, and in a case of vacancy, appoint a mandarin; but before the imperial sanction is received, he cannot be installed in his office. To obtain this, a full report of his merits is forwarded to the board of officers in the capital, and the paper is laid before the sovereign, who commonly approves of the recommendation. He also retains the prerogative of granting titles of nobility; and every person, on receiving such title, is required to repair to the capital to render thanks for the imperial favour. Great officers of state appear there at least once in three years; inferior mandarins go to the audience after having obtained promotion. Thus the Great Potentate obtains a sight of his many thousand servants, and has always an opportunity of inspiring them with awe and gratitude.

The emperor is sovereign lord over the life and death of his subjects. The tribunal or board of punishments having in all ordinary cases prepared a short memorial of the crimes of the culprit, presents this paper at the stated season to the emperor, who is surrounded by his ministers. He is obliged to prepare himself by fasting and invoking Heaven, lest he should condemn the innocent. Thus qualified for this solemn and painful duty, he marks off with the vermilion pencil the criminals who are to suffer death, and the sentence is soon executed. Like other sovereigns, he can relieve whomsoever he pleases, and in times of general calamity, or on birth days, or other joyful occasions, he frequently orders the prisoners to be set free, or their punishments to be mitigated.

The whole finances of the empire are under his immediate control, and he can use the public money at his pleasure. There exists, however, a private treasure for his immediate use, hoarded up in the palace. This contains not merely money, but pearls, precious stones, silks, etc., and has been always very rich.

From time to time, this great ruler gives an account of his conduct to the nation. On these occasions, should any public calamity be afflicting the nation at the time, his expressions are of a most debasing description. They are chosen, like the phraseology of all similar documents, from the best models of his predecessors. The paper itself is drawn up by a member of the *Han-lin* college, and is consequently a mere matter of

form. Such proclamations are very frequent, and become finally a matter of course. It is like making a poem by collecting phrases out of the *Gradus ad Parnassum*, which will naturally contain many truly poetical turns, but by no means prove the poetical genius of the compiler. The edict about rain, which made so much noise in Europe, is of this description. We insert it here as a specimen from amongst several thousands of the same description. It is in the form of a prayer or petition addressed to the azure heavens:

"Kneeling, a memorial is hereby presented to cause affairs to be heard. Oh, alas, imperial Heaven! were not the world afflicted by extraordinary changes, I would not dare to present extraordinary services. But this year the drought is most unusual. The summer is past, and no rain has fallen. Not only do agriculture and human beings feel the dire calamity, but also beasts and insects, herbs and trees, almost cease to live.

"I, the minister of Heaven, am placed over mankind, and am responsible for keeping the world in order, and tranquillizing the people. Although it is now impossible for me to sleep or eat with composure; although I am scorched with grief, and tremble with anxiety, still after all, no genial and copious showers have been obtained. Some days ago I fasted, and offered rich sacrifices on the altars of the gods of the land and the grain; and had to be thankful for gathering clouds and slight showers, but not enough to cause gladness. Looking up, I consider that Heaven's heart is benevolence and love. The sole cause is the daily deeper atrocity of my sins, but little sincerity, and little devotion. Hence I have been unable to move Heaven's heart, and bring down abundant blessings.

"Having respectfully searched the records, I find, that in the 24th year of Keën-lung, my imperial grandfather, the high, honourable and pure emperor, reverently performed a great snow service. I feel impelled by ten thousand considerations to look up and imitate the usage; and with trembling anxiety, rashly assail Heaven, examine myself, and consider my errors; looking up, and hoping that I may obtain pardon. I ask myself, whether in sacrificial services, I have been disrespectful; whether or not, pride and prodigality

have had a place in my heart, springing up there unobserved; whether from the length of time I have become remiss in attending to the affairs of government, and have been unable to attend to them with that serious diligence and strenuous effort which I ought; whether I have uttered irreverent words, and have deserved reprehension; whether perfect equity has been attained in conferring rewards, or inflicting punishments."

Thus the imperial sinner goes on to hint at his probable faults, and then concludes:

"Prostrate, I beg imperial Heaven to pardon my ignorance and stupidity, and to grant me renovation; for myriads of innocent people are involved by me, a single man. My sins are so numerous, it is difficult to escape from them. Summer is past, and autumn arrived; to wait longer will really be impossible. Knocking head, I pray imperial Heaven to hasten and confer gracious deliverance, a speedy and divinely beneficial rain, and to save the people's lives, and in some degree redeem my iniquities. Oh, alas! imperial Heaven! observe these things! alas! imperial Heaven, be gracious! I am inexpressibly grieved, alarmed, and frightened. Reverently, this memorial is presented. 12th year of Taou-kuang—28th day, 6th month—July 25th, 1832."

When the country is in a flourishing state, the emperor praises himself, and thanks the heavens that he is so very just a man. This containing mere words, no further importance is attached to the confession. As an instance of a different nature, we quote the following:

During the latter years of the reign of Kea-king, May 14th, 1818, a storm from the s.e. suddenly rose and swept over the capital. In one moment, the whole heavens were darkened, and the atmosphere was filled with sand and dust, to such a degree, that objects in houses could not be distinguished without the light of a candle. The emperor confessed, that his heart trembled from fear. He therefore examines himself, whether this calamity is owing to his own mismanagement, or the wickedness of his officers, and calls upon all his ministers of state, and the mandarins in general to institute strict self-examination, that the cause which thus disturbs the universe may be discovered.

Turning around, he finds sufficient

because to upbraid the astronomical board, which only a few days previously had announced, that the felicitous stars shed around their light, indicating the felicity and duration of his reign. All which, and many things more, were mere bombast. After much guessing, it was finally found probable, that some unjust imprisonment had given rise to this dreadful calamity, and an officer was instantly despatched to the place where the storm arose.

The censors, at the same time, were not idle, and told his imperial majesty that all this was owing to the dismissal of a meritorious prime minister. This hint the emperor did not relish, and therefore he told the advisers never to meddle with his appointments. The astronomical board came now to soothe the disturbed mind with prognostications, consisting, however, merely of the opinions of astrological writers.

At the same time, a drought occurred, and the emperor went in consequence to sacrifice to Heaven; his brother worshipped earth, one of his sons the presiding divinity of the year, another the wind, and two more some other holy being. Each had a prayer made, which was printed in the Peking gazettes, and the contents were as pious and edifying as the former.

The emperor, as the high priest, has to perform sacrificial duties. These are far more numerous and burdensome than all his other functions. A tedious ceremonial, comprehending a number of fulsome rites, engages his attention, the least negligence in any of which would subject him to far greater censure than oppressive measures.—*Gutzlaff's China Opened.*

“I CANNOT AFFORD IT.”

“THE thing does not admit of a question. It would be a most astonishing improvement.”

“Perhaps it would; but I cannot afford it.”

“My dear sir, the expense would be a mere trifle; scarcely fifty pounds.”

“Perhaps not; or perhaps it might be five hundred. In either case, I consider it unnecessary, and I cannot afford it.”

This was the fag end of a conversation between my uncle Barnaby and captain Tankerville, a half-pay officer in the neighbourhood, who sometimes dropped in at the hall. What was the improve-

ment he had then suggested, I cannot say: he was always proposing something new. My uncle had a fine old organ, which the captain would often advise him to exchange for a modern grand pianoforte. There was a nice little farm-house on the skirts of the estate, which the captain said spoiled the view from the drawing-room windows. He tried to persuade my uncle to pull down the house, and make a plantation of the grounds, and exchange the sheep and cows for a herd of deer, which, he observed, would present a vastly more picturesque appearance, besides affording excellent sport to my uncle and his friends. Once I heard him pressing my uncle to purchase a pair of horses from a particular friend of his, who, he said, was willing to sell them for less than half their value. Another time, when he happened to find out that my uncle had invited a few friends to dinner, he was haranguing about the indispensable necessity of having down a man-cook from one of the London hotels, otherwise it was impossible to have the dinner dressed fit to set before a party.

My uncle took very little notice of the captain's speeches: I never knew him do any thing or alter any thing at his suggestion. Though he never spoke of him in his absence, I am persuaded he had no very high opinion of him; and would not, I suspect, have kept up any intercourse with him, but for a sort of family connexion.

What was his proposal on the occasion first referred to, I do not know, nor does it much signify; but it was the first time I had heard my uncle make use of the expression, “I cannot afford it,” and it rather startled me, and left a painful impression on my mind. My uncle was reckoned a rich man in the neighbourhood. The house and grounds were his own, and he was landlord to several farmers. Besides this, I knew he had property in the funds; for he always went to London twice a year to receive his dividends. My first journey to London was in company with him and my cousin Frank. Uncle took us with him to the bank, and we saw him receive a large sum of money. I knew, too, that he had always plenty of money in the house; and when he wanted more, he only wrote a cheque on his country banker, and the money was sure to come. I could not at all understand how it was possible that uncle Barnaby could not afford to have and do any thing and every thing he

chose. I heard, however, that he had paid a great deal of money for building the school-house, and buying books for the children; and, for a moment, I indulged the childish fear, that he might have spent all and not have saved enough for himself; and I thought, What a sad thing it would be for uncle Barnaby to become poor, who was so kind to every body, and did so much good with his money!

It was some relief to me to find that my uncle had not quite exhausted his resources; for in the course of our walk that day, we called at a bookseller's shop in the town, where my uncle expected to find some books he had ordered. The books were ready; my uncle paid the bill amounting to several pounds, and taking out of the parcel, "Rollin's Ancient History," and "Bewick's British Birds," both handsomely bound, he presented the former to Frank, and the latter to me. We then went to a nursery garden, where my uncle purchased some choice plants for the green-house. On our way home, we called at one of the cottages, where a carpenter was appointed to meet my uncle to take orders for repairing the house and placing a new fence round the garden. This cottage was the dwelling of a poor family, the head of which had been disabled from laborious work by injuries sustained* in a benevolent and successful effort to rescue a poor old woman from perishing in the flames of her dwelling. My uncle had just settled the cottage and orchard on the poor man and his wife for their lives, and he was now doing several little matters for the comfort of the family. The afflicted man was employed in assorting sea weeds for sale to occasional visitors, or to persons curious in marine botany: and my uncle encouraged the poor woman to hope that, by her own industry and that of her children, with the produce of the garden, orchard, bee-hives, and poultry-yard, they would be enabled to live in comfort. My uncle having given his directions to the carpenter, and spoken a few kind words to the family, hurried away from the grateful acknowledgments which the poor people were pouring forth; but I saw the tears of benevolent pleasure glisten in his eyes: I remembered the words of Job, "When the ear heard me, then it blessed me; and when the eye saw me, it gave witness to me. The blessing of him that

was ready to perish came upon me," Job xxix. 11. 13; and I felt glad that uncle Barnaby could afford to do what he thought right, if he could not do what Captain Tankerville advised him. I will here just observe that the children at the cottage were brought up in industry, credit, and comfort, and the parents lived to a good old age to enjoy the liberality of their kind benefactor.

On our return from our walk, we found an old friend of my uncle's, who was unexpectedly come to spend a few days with him. He was a tall, fine-looking man, about fifty years of age; in his manners, as fine a combination of frankness, dignity, simplicity, and true politeness, as I ever beheld. My uncle and the visitor seemed perfectly to understand each other's tastes and habits. "I did not write," said the visitor, "to apprise you of my coming; for it was not till the close of last night's debate that I found myself at liberty to take a few days' relaxation: I knew from your letter of Monday that you were at home, and would receive me." A very few words served to express a cordial welcome, and the stranger seemed at once quite at home with us. There was no fuss or ceremony; the dinner was served and every thing went on just in its usual course. The friends seemed only intent on enjoying and improving their friendly intercourse. Frank and myself were not sent away: much of the conversation was such as would interest and instruct us, and my uncle seemed to encourage us to remain. They spoke of books, and men, and things; recollections of by-gone days and acquaintances of youth, widely scattered by the vicissitudes of time, or having passed the boundary of mortality. My uncle and his guest seemed to think and feel alike on the subjects of religion, morality, and human character and conduct. Their remarks and anecdotes were pertinent, lively, and striking; and while this kind of conversation lasted, we young ones were almost as much interested in it as themselves. But when it veered round to the state of affairs on the continent; the debates about the malt tax, and property tax, and such like matters, which were not at all interesting to us, we quietly retreated to the other end of the room to examine the books which had been presented to us. It was not long before my uncle called us, saying he wanted Frank to make a drawing. It was always a pleasure to be employed

* See page 33.

for one so kind and so much beloved. While Frank went to fetch his portfolio and pencils, I was sent into the library for some architectural books; and we were presently all happily engaged in comparing and selecting plans for lodges and rustic cottages, of which it appeared my uncle's friend was intending to erect several. Frank with much promptitude and good will set about the drawings, reducing or extending the plan according to the proportions desired. I had not Frank's abilities or proficiency, but I felt pleased to observe his method, to watch his progress, and to wait upon him with any thing he might require; and I shared his pleasure, too, in the approbation he received for the neatness and accuracy of his performances. Frank's success in drawing led the conversation on to paintings and artists. The visitor, whom my uncle called lord C., observed that the exhibition that year equalled, if not excelled, any one that he had previously witnessed. He spoke, in particular, with high admiration, of a fine scripture piece by the first English painter of the day. He said it was likely to go out of the country, which he much regretted, and had felt a strong inclination to purchase it; "but," added he, "I could not justify myself in the expense, I could not afford it." "Well," thought I, "then lord C. is not richer than uncle Barnaby, perhaps not so rich; for perhaps uncle did not wish to have what captain Tankerville was talking about; but lord C. says he did wish for the picture, but could not afford to buy it.

When Frank and I were alone, together, something came up about the events of the day, and I observed, that I thought lord C. "a remarkably kind, pleasant, gentleman. He does not seem to have a bit of pride, any more than my uncle; and uncle does not say, 'My lord,' to him, every sentence he speaks, as the people at the public house did to those two young nobleman: don't you remember?"

"Yes," said Frank, "I remember. My uncle knows both himself and lord C. better than to beplaster him with his titles, as those low-lived people did.

"People who are used to greatness, don't make a fuss about it. Besides, both my uncle and his friend are religious men, and therefore they think most of worldly distinctions and possessions, as affording them the means of doing good and setting a good example; and they keep in mind that the more they possess,

the more they have to account for; and when people think of this, as they ought, it keeps them from being lifted up with pride.

SAMUEL. Well, I don't know that ever I spoke to a lord before, and I certainly did not at first think that lord C. was one.

FRANK. Why not? What did you expect of a lord? I am sure he is a fine-looking man.

SAMUEL. Yes, that he is. He is very much like the soldier that you and uncle admired so, that day when we talked about nobility.

FRANK. I was going to remind you of that conversation. You remember uncle said he knew some, who together with as fine a form as the handsome soldier, and as courageous a heart as the poor labourer who risked his own life to save another, possessed cultivated minds, exalted rank, and extensive possessions; and he considered such persons noble indeed; that is, both in their station and character. Lord C. I doubt not, was one, perhaps the very one to whom he referred.

SAMUEL. Is lord C. rich?

FRANK. Yes: he has two large estates in the country, and a fine house in London: besides, he must be rich to do so much good as he does.

SAMUEL. Why, he said he could not afford to buy a picture he wished for. Did that seem like a nobleman?

FRANK. Yes; I think very much so. He is too noble to indulge himself in any needless gratification that would entrench upon his means of doing good. The richest people have bounds to their wealth, and if they indulge themselves in every thing they take a fancy to, they may soon become comparatively poor, and deprive themselves of the means of doing good.

SAMUEL. Then do you think it would have been wrong for lord C. to buy the picture?

FRANK. I cannot judge for him what would be right or wrong; but I do not doubt, indeed I know, that he acts upon a plan in the disposal of his income: and what he meant by saying he could not afford it, was that, at that particular time, it would interfere with his other arrangements, and therefore he did not consider it right. Why I heard uncle say, that last Christmas he returned to his tenants part of their rent, amounting to more than a thousand pounds, in consideration of the unfavourable harvest; and a man

must be rich indeed to be able to do that without exercising prudence and self-denial in some way or other. Then he is going to build several cottages on different parts of his estate: they will cost a great deal of money; more than many fine pictures.

SAMUEL. But I suppose that it is for his own pleasure as much as a fine picture.

FRANK. I will answer for it, he has some other design in it than mere pleasure. They will, no doubt, be so contrived as to be ornamental to the estate; but you may depend upon it, he has some plan of making them comfortable homes for old servants or decayed tenants. He has a truly noble, generous heart; none of his schemes are selfish. Whether he is purposing to incur expense or avoid it, it is sure to come out that his mind is intent on promoting the good of his fellow creatures. Is not his countenance the very picture of benevolence and cheerfulness?

SAMUEL. Yes, it is indeed: he seems contented with all around him. When he said he did not buy the picture because he could not afford it, he did not speak as if it made him unhappy, or like a person fretting after something he could not get. Did you ever notice, when captain Tankerville says, "I wish I could afford do so and so," or "I would have such or such a thing, if I could afford it," how snarlish and discontented he looks, as if he could not enjoy any thing at all. Very different is this from either lord C. or uncle Barnaby.

FRANK. Different! Yes, the very opposite. I'll tell you what, Samuel, from what I have seen both of uncle Barnaby and lord C. who, I think, are about as happy as any two mortal men can be, I firmly believe that the secret of happiness consists in the ascendancy of the benevolent dispositions over the selfish ones. Such men find a great deal more real pleasure in giving up a fine picture and making a fellow creature comfortable, than they could have found in gratifying themselves and neglecting others. You have brought the captain into comparison with them; do you remember how he fretted, and fumed, and snarled at his wife, and snapped at the children, and abused the servants, and even kicked the dog, and made himself miserable, just because he was disappointed of a turbot or a john doree which he had ordered from London for dinner.

Why uncle or lord C. would not have ruffled a muscle of their face for such a trifle; but would have eaten their slice of beef or mutton, and enjoyed the company of their friends just as contentedly as if they had expected nothing else.

SAMUEL. Yes; it was the very day that the captain declared he could not afford a guinea to help the poor farmer who was burned out. He was just rightly answered when uncle said to him, that the money he would have paid to his fishmonger would just do, and then he would be reconciled to the disappointment. However, he took care not to give it, but he kept up his ill-humour all day.

FRANK. Much good may his ill-humour do him. But I was about to tell you a generous, noble act of lord C.'s which I am sure will please you, and make you honour him. A few years ago, an estate in the West Indies came into his possession, which of course had been cultivated by slaves. He immediately emancipated the negroes, and sent over a gentleman of views as liberal, and principles as upright and generous as his own, to reside on the property, and take the management of affairs. The emancipated negroes were engaged as free labourers, and allowed to occupy their huts and provision grounds as before, on condition of working a certain number of days for the proprietor. Every proper arrangement was also made for the instruction of the people, the education of children, and the care of the aged and infirm. I have heard uncle say that it required no small portion of magnanimity and heroism in lord C. to bear the ridicule and opposition which his generous conduct brought upon him. It was predicted that the property would become valueless; and he was charged with madly throwing away the inheritance of his family, and inciting the negroes to rebellion. Lord C. did not say that he could not afford to make the experiment; but, having counted the cost, he persevered in his noble enterprise, and has outlived the scorn and ridicule which he was too noble-minded to regard, and to falsify the predictions of ruin and rebellion by the pleasing spectacle of a flourishing estate, and an industrious, contented, and grateful peasantry. Uncle was saying the other day, that so far from having been a loser by his generosity, he had no doubt that the property was worth thousands more than it would have been under

an oppressive and selfish proprietor. Is not lord C. a nobleman by nature as well as by rank?

SAMUEL. Indeed he is; and it just makes good what uncle Barnaby said, that though poor and uneducated persons might possess nobleness of mind and character, and some persons of high birth, and connexions, and education, and fortune, might be worthless and contemptible; yet, where the good qualities of mind and heart meet, together with the advantages of rank and fortune, the possessor was noble indeed. Lord C. is so; and I hope there are many more such lords in the land.

When I entered the breakfast room next morning, I felt, as I had done the evening before, a little confused and awkward at finding myself in the presence of lord C. His lordship, I fancy, was not at all conscious of the circumstance. He maintained his habitual ease and kindness of manner, and was too fully occupied in pleasant and profitable conversation with his old and endeared friend, to take any notice of my perturbation, which soon subsided, and I only realized the presence of two intelligent and benevolent gentlemen, into whose society it was a privilege for us youngsters to be admitted, and which it was our duty and interest to improve. On speaking to my uncle, afterwards, he explained to me, how, in the British constitution, the nobles of the land were the connecting link between the Sovereign and the Commons, adding, that he hoped, I should always render "honour to whom honour is due." I will just add, before I take leave of his lordship, that the visit proved an excellent introduction for Frank. His drawings had gained him great credit with his noble employer, and some years afterwards, when he had received instructions from an eminent land-surveyor and engineer, he was engaged as land steward on one of lord C.'s estates; a situation which he still holds under the present lord, and is highly and deservedly respected both for his talents and character.

But I have written only what passed between Frank and myself about the expression, "I cannot afford it," which hitherto I had considered as synonymous with, "I have not money enough to buy it." Its adoption by lord C., and Frank's explanation of it, led me to perceive that it was not to be confined to so narrow an application, but that per-

sons might have the means of obtaining things which they nevertheless could not with propriety afford to obtain, and I wished to have my uncle's sentiments on the subject. I heard my uncle reproving one of his men for wasting some oats: he said he could not afford to keep a wasteful servant, and if he saw a repetition of such carelessness, he must dismiss him. At the same time, there were two old horses in the meadow past work, yet they were liberally supplied with food as long as they lived. I heard captain Tankerville declare that he could not afford to place his son at school, at a time when he was betting hundreds of pounds on the horses at Newmarket races. I heard uncle Barnaby say, in reply to a request from the same gentleman, either to lend him, or be bound for him, a considerable sum of money, that he could not afford it. The captain pressed him again, and declared that he was a ruined man if he refused. My uncle, however, persisted in his refusal. Not long after, the captain went abroad, I did not exactly know why or wherefore; but I fancy there was something not very honourable; and then my uncle placed the little boy at school, gave him a good education, and put him forward in life. He also advanced money to enable Mrs. Tankerville, who was an excellent and accomplished woman, and left entirely destitute, to open an establishment for the education of a few young ladies, together with her own little girls. On each of these occasions, I gathered up a few of uncle Barnaby's observations, which were somewhat to the following effect.

"I cannot afford that any property should be *wasted*. However much I possess, I may find a good use for it all; and as I must give account for it all, it is my duty to see that it is made the best use of, and employed to do as much good as possible. Even the Almighty Creator of the world, though he is infinitely rich and bountiful, has yet made nothing to be wasted.

"I cannot afford to buy things for which I have no need and no use, merely in compliance with the dictation of others: I know, or ought to know my own affairs best."

"I cannot afford to follow every whimsical and expensive fashion, merely for the sake of vying with others, or lest I should be ridiculed for singularity.

"I cannot afford to bestow much property upon things which are not of real

value, and permanent utility to myself or others. There ought to be some correspondence between the value of the article and the property expended upon it.

"I cannot afford expenses which would straiten my general resources, and leave me unprovided for any future contingency.

"I cannot afford that which would be inconsistent with my general scale and plan of living. I must have all of a piece." In connexion with this remark, I remember my uncle referring to a well drawn sketch by Goldsmith, where a plain country clergyman of very limited income, is described as having been overpersuaded, against his own better judgment, to have a large picture painted, comprehending the whole of his family. When the picture was brought home, not merely was the good man distressed to find the means of paying for it, he actually found, to his great mortification, that he had not a sitting room in his parsonage large enough to contain it. My uncle also mentioned with great approbation, the conduct of my own dear father, who, though he had a carriage and pair of horses bequeathed to him, with a legacy that would at least have borne all their expense, said he could not afford to keep them; that is, he could not afford to keep up a style of living in every respect suitable. It may be here remarked, that all that has been said will equally apply to the horse and gig, or drawing-room furniture, or costly apparel of the tradesman and his family, or to the gown and bonnet of the maid-servant, as to the buildings, the equipages, or costly paintings, of my lord or the squire.

"I cannot afford to do that which would put it out of my power to meet the just expectations of all connected with me.

"I cannot afford to spend that upon myself, which my conscience tells me ought to be devoted, and which my first and best impulse had devoted to the claims of benevolence or religion.

"I cannot squander property to support the idle and worthless in extravagance and vice, which ought to promote the comfort of the necessitous and deserving.

"I cannot, upon any account, afford to do that which would be in any way offensive to God; for his favour is life, and his loving-kindness is better than life; for his I am, and him I ought to serve. I am not my own, but bought

with a price, and bound to glorify God, in my body, and spirit, and possessions, which all are his.

"I cannot afford to squander away the means conducive to my soul's eternal interests; for 'what will it profit a man, if he shall gain the whole world, and lose his own soul? or what shall a man give in exchange for his soul?'"

"In vain the world accosts my ear,
And tempts my heart anew,
I cannot buy your bliss so dear,
Nor part with heaven for you."

C.

SPRING.

THIS pleasant season has always been regarded as obviously presenting an image of youthful life. The newness, liveliness, fair appearance, exuberance of the vital principle, rapid growth—such are the flattering points of likeness. But there are also less pleasing circumstances of resemblance—the frailty and susceptibility, so peculiarly liable to fatal injury, from inauspicious influences, blights, diseases. Those who have to watch over infancy, childhood, and early youth, can often see, in smitten plants and flowers, the emblems of what they have to fear for their charge.

There is the circumstance, that the evil in the human disposition can grow even faster than the good; as in spring the weeds, the useless and noxious vegetables, the offensive or venomous animals, thrive as well as the useful and salutary productions; and that, too, not only without attention to assist them, but in spite of efforts to repress or extirpate them.

There is the circumstance, that it is yet to be proved whether the early season will have its value ultimately; whether fair and hopeful appearances and beginnings will not end in a mortifying disappointment. How many a rich bloom of the trees comes to nothing! How many a field of corn, promising in the blade, disappoints in the harvest! Under this point of analogy, the vernal human beings are a subject for pensive, for almost melancholy contemplation.

There is one specially instructive point of resemblance. Spring is the season for diligent cultivation, so is youth. What if the spring were suffered to go past without any cares and labours of husbandry? But see how the parallel season of human life is, in numberless instances, consumed away

under a destitution of the discipline requisite to form a rational being to wisdom, goodness, and happiness; through the criminal neglect of those who have the charge and the accountability, and the almost infallibly consequent carelessness of the undisciplined creatures themselves.

One shall not seldom be struck with the disparity of the two provinces of cultivation. The garden shall be put in neat order; the fruit-tree trimmed and trained; the corn-field exhibiting a clean shining breadth of green; but the children and the youth bearing every mark of mental and moral rudeness.

On the contrary, it is delightful to see the spring season of life advancing under such a cultivation of the instructor's care, of conscientious self-tuition, and of Divine influence, as to give good hope of rich ensuing seasons. A part of the pleasure imparted by the beauty of the spring is, whether we are exactly aware of it or not, in an anticipation of what it is to result in. And though, as we have said, there is much for uncomplacent presentiment in beholding the bloom, animation, and unfolding faculties of early life, yet they who are affectionately interested in the sight, are insensibly carried forward in imagination to the virtues and accomplishments which they are willing to foresee in the mature and advanced stages.

It may be added, as one more point in this parallel, that the rapid passing away of the peculiar beauty of the spring gives an emblem of the transient continuance of the lively and joyous period of human life.

We have seen that they are not all pleasing ideas that arise in the contemplation of the vernal season. There is one of a profoundly gloomy character—that of the portentous general contrast between the beauty of the natural, and the deformity of the moral world. A correspondence seems to be required in things which are associated together. Survey, then, the fair scene, (such as on this day,) and think what kind of beings, to correspond to it, the rational inhabitants ought to be. (Not a few, a small intermingled portion, but the general race.) Would not the conception be—innocence, ingenuousness, all the kind and sweet affections, bright refined thought, spontaneous advancement in all good, piety to heaven?

But now look on the actual fact; and

that without going so far off as those fine tracts of the earth where man is the most cruel and ferocious of the wild beasts that infest them. See, in these more civilized regions, the coarse debasements, the selfishness, the ill-temper, and malignant passions, the hostile artifices, the practices of injustice, the obstinacy in evil habit, the irreligion, both negative and daringly positive.

Within the memory of many of us, how much of the vernal beauty of Europe, every year, has been trodden under the feet, or blasted by the ravages of hostile armies; how many a blooming bower has given out its odours mingled with the putrid effluvia of human creatures, killed by one another!

Such is the correspondence of the inhabitants to the beautiful scenery of their dwelling-place! The fair luxury of spring serves to bring out more prominently the hideous features of the moral condition.

But even if we could keep out of view this directly moral contrast, there are still other circumstances of a gloomy colour. Amidst this glowing life of the vernal season, there are, languor and sickness, and infirm old age, and death. While nature smiles, there are many pale countenances that do not. Sometimes you have met, slowly pacing the green meadow or the garden, a figure emaciated by illness, or feeble with age; and were the more forcibly struck by the spectacle as seen amidst a luxuriance of life. For a moment you have felt as if all the living beauty faded or receded from around, in the shock of the contrast. You may have gone into a house beset with roses and all the pride of spring, to see a person lingering and sinking in the last feebleness of mortality. You may have seen a funeral train passing through a flowery avenue. And the ground, which is the depository of the dead, bears, not the less for that, its share of the beauty of spring. The great course of nature pays no regard to the particular circumstances of man—no suspension, no sympathy.

We will note but one more grave consideration. To a person in the latter stages of life, if destitute of the sentiments and expectations of religion, this world of beauty must lose its captivations. It must even take a melancholy aspect. For, what should strike him so directly and forcibly as the thought that he is soon to leave it? It may even

appear too probable, that this is the last spring season he shall behold. While he looks upon it, he may feel an intimation that he is bidding it adieu. His paradise is retiring behind him; and what but a dreary immeasurable desert is before him? This will blast the fair scene while he surveys it, however rich its hues and the sunshine that gilds it.

On the contrary, and by the same rule, this fair display of the Creator's works and resources will be gratifying the most and the latest to the soul animated with the love of God, and the confidence of soon entering on a nobler scene. "Let me," he may say, "look once more at what my Divine Father has diffused even hither, as a faint intimation of what he has somewhere else. I am pleased with this, as a distant outskirt, as it were, of the paradise toward which I am going."

Though we are not informed of the exact manner of a happy existence in another state, assuredly there will be an ample and eternal exercise of the faculties on the wondrous works of the Almighty; and therefore a mode of perception adapted to apprehend their beauty, harmony, and magnificence.

It is not for us to conjecture whether good spirits corporeally detached from this world, are therefore withdrawn from all such relation to it, or knowledge of it, as would admit of their retaining still some perception of the material beauty and sublimity displayed upon it by the Creator. But it may well be presumed that, in one region or other of his dominions, the intellectual being will be empowered with a faculty to perceive every order of phenomena in which his glory is manifested. If we think of an angel traversing this earth, though he has not our mode of apprehending this fair vision of spring, it were absurd to suppose that therefore all this material grace and splendour is to him obliterated, blank, and indifferent. We shall not, then, believe that any change which shall elevate the human spirit will, by that very fact, destroy, as to its perception, admiration, and enjoyment, any of the characters on the works of God.—*Foster.*

THE BEST KNOWLEDGE.

THE knowledge of Christ Jesus and him crucified excels all other knowledge, and so in comparison thereof all other knowledge, upon a right judgment, is as

nothing; so the soul being rightly convinced thereof, sets a higher price upon that knowledge, than upon all other knowledge besides; it prizeth it highly in itself and others, reckons all other knowledge without it but a curious ignorance or an impertinent knowledge, and contents itself abundantly in this knowledge though it want other.

Because, that which is of most concernment requires my greatest diligence to attain it; I am concerned to spend more time in attaining this than that; and I will rob other studies and disquisitions of the time that otherwise might be conducive to attain the knowledge of them, rather than that those studies should consume the time that should be allotted to this. My time is part of that talent which my Maker hath put into my hand, and for which he will at the great day demand an account; and if I have spent that talent in unprofitable employments, or in less profitable than I should, my arrear is so much the greater.

If I have consumed my time in seeking preferment, honour, or wealth in this world; in studying how to please myself with vain and unnecessary recreations; in unlawful or excessive pleasures; in unlawful and immoderate curiosities; when I might have been better engaged in studying the mystery of Christ, or my conformity to his will, or improving my interest in him, I have committed two follies at once. I have lost my talent of time and opportunity, for which I am accountable, as mispent; and I have lost the advantage which I had in my hand, to improve my interest in God and favour from him, and love to him; and though my talent might have gained ten, yet at most it hath gained but two. Surely when death comes, the most comfortable hours that can return to our memories will be those we spent in improving the true, and experimental, and practical knowledge of Christ Jesus, and him crucified.—*Hale.*

MEDICINE.

PHYSIC, for the most part, is nothing else but a substitute for exercise or temperance.—*Addison.*

THE PASSIONS.

THE passions, like heavy bodies down steep hills, once in motion, move themselves, and know no ground but the bottom.—*Fuller.*

MORAL POWER OF YOUNG MEN.—No. II.

I PROCEED now to remark, that with a Christian character young men may do eminent good to mankind in all the religious, social, and public duties and relations of life.

If you would qualify yourself to put forth the greatest and most benign influence upon the world, you must become religious. What attainments in knowledge and in blessedness would the human race have ere this made, had all been sinless like angels of heaven, all constantly impelled onward by the holy and benevolent power of religion! Judge from the change often witnessed in men at their regeneration; the very countenance and eye speak the kindling of a new intellectual as well as moral life. Multitudes have thus been redeemed from inglorious torpor, and made active and distinguished instruments of good. Facts demonstrate that a very large proportion of that enterprise which goes to elevate and bless our nation and the world, both intellectually and morally, is of pious minds.

Read history; look abroad on the world. Who first led mankind to think? Men taught by God. Who unlocked the earliest treasures of knowledge? Men imbued with knowledge from on high. And in more recent times, who awoke the world from a night of ages? Christians. Who introduced civil and religious liberty? Christians. Who have ever taken the lead in the march of the human soul towards a higher and more excellent condition? Christians. Who are at this moment resuscitating the dead intellect, and kindling the torch of science, in the dark places of the earth? Christians. In a word, who are putting forth an influence to reclaim this world of fallen, guilty, miserable minds to knowledge, to virtue, to God? Christians.

Observe the salutary influence produced by attending the means of grace. Mark the surprising difference between those places which have long enjoyed the influence of an enlightened, pious ministry, and those which have not. And even in towns favoured with the preaching of the gospel, the children of those families which shun the house of God, and waste the sabbath at home or in the fields, will seldom come to anything good or great. Their history like that of their fathers, will be

briefly and sadly this—They were born, they ate, they drank, they were married, they had children like themselves, they died, they were buried, unknowing and unknown, unblest and unblessed. And where do we find the abject victims of superstition and the miserable tools of political demagogues so numerous, as in places long destitute of the preached gospel?

Now it happens, that in all ages of the world, and in all countries, those communities and nations which have enjoyed most real freedom of every name, social, religious, intellectual, civil, and have been most elevated in the scale of all that makes men and nations great and blessed, are those identically in which the Bible has been most faithfully preached. Where the Bible has not been proscribed, either by avowed infidels or corrupt ecclesiastics, and in its place the grovelling dogmas of men substituted, there have been the green spots of our earth, the oases of the desert. There men and nations have risen from darkness and thralldom to life and liberty.

You will sometimes hear men of erratic minds undertaking to enlighten the world, treat the Bible as an old almanack, which was of service once, but may now be laid aside for something better and more modern. Allow me to say, that it is constantly becoming more and more apparent to all sound intellects, that the Bible, though the oldest book in the world, and though not given expressly to teach us natural knowledge, is yet in advance of all the sciences, arts, literature, governments, and improvements of the world. You cannot advance any science which the Bible has not, in its moral aspects, anticipated; you cannot enter into any improvements of politics, law, civil institutions, domestic relations, where the Bible has not gone before you to prepare the way. At various periods have men risen up against it, and advanced imposing theories subversive of its Divine authority, or of its doctrines; but they and their theories have perished together. Many a great perverted intellect has risen up, like a flaming comet threatening wide disaster, which has soon passed away and disappeared for ever; while this divine luminary has been steadily ascending higher and higher towards its throne and zenith in the heavens. And we know that the time must come when

all science, philosophy, politics, yea every device for elevating and-improving the human race, will give to it their supreme homage.

Whatever tends to exalt the mind and the character; whatever imparts to the immortal spirit dominion over the lusts of the flesh, the lusts of the eye, and the pride of life; whatever tends to diffuse through society the charms of elevated and benevolent sentiment; whatever tends to break from the mind the fetters of bigoted ignorance, and infuse into it the life of genuine liberality; whatever lifts up the sweet smile of virtuous blessedness in domestic circles; whatever encourages and rewards industry in all classes; whatever sustains the institutions of science and of equitable civil government; in short, whatever is concerned in the promotion of that godliness which is profitable unto all things, having promise of the life that now is, and of that which is to come, every wise and benevolent citizen will love and promote.

The learned professions all look for their supplies to young men. Think of the immense moral power they wield over society. Is it of small importance, whether those who are to illustrate and advocate our laws, and adjudicate our civil rights, those who are to be the professors in our public seminaries and teachers of our youth, those who are to have in trust the health and the lives of their fellow-beings, in the season when the presence and consolations of religion are so essentially needed, shall be men fearing God and honestly seeking to "do good to all men" as they have opportunity? Were it no calamity to have them "haters of God" and "lovers of their own selves," cold and dead to all sentiments of piety, reckless of their moral accountability, and scattering pestilence and destruction around them?

The benevolent institutions and movements of the age depend for their success very much upon young men. They do not of course look to them for their largest pecuniary aid, but for ingenuity, courage, energy, labour, to originate means and urge them on. "A propensity rather to indulge the illusions of hope, than to calculate probabilities," says the author of the *Natural History of Enthusiasm*, "may seem almost a necessary qualification for those who, in this world of abounding evil, are

to devise the means of checking its triumphs. To raise fallen humanity from its degradation, to rescue the oppressed, to deliver the needy, to save the lost, are enterprises for the most part so little recommended by a fair promise of success, that few will engage in them but those who, by a happy infirmity of the reasoning faculty, are prone to hope where cautious men despond."

This general principle may be equally applied to those in the earlier periods of life, while yet hope, ardour, and enterprise predominate over the chastised, subdued wisdom of advanced age. And hence, while wisdom, counsel, and funds must come principally from the more advanced, young men are to strike out plans, invent ways, and push on the wheels, with courage, resolution, and labour.

You should also accompany your active efforts with the contribution of money, according to your means. A little given by a young man just starting in life, is worth as much as a large sum given later. Give systematically and from principle. If at any time you are unable to be present at the stated time for contributing to a benevolent object, which it is your duty to support, either send your contribution, or double it the next time. Be sure you do not forget this, and spend it in some other way; it would be a hazardous aggression upon the integrity of your principles.

Although it is desirable that you should accumulate a sufficient capital with which to pursue your business to advantage, yet do not suppose that you are exonerated from beneficence, or rather deprived of the privilege of exercising it, till that point is gained. Consider a portion of the first money you obtain as sacred to benevolence; let the same principle go with you through life, and thus appropriate a part of all your gains. This is infinitely important to the moral health of your own soul, as well as to your usefulness. The highest wisdom ever known has said, "It is more blessed to give than to receive;" and that man has the true value of money yet to learn, who has not learned to do good with it. But while you give to public objects, remember also your family connexions, and other poor but worthy relatives and acquaintances. Some men neglect these, even while contri-

buting with a becoming liberality to public objects. "These things ought you to do, and not to leave the others undone."

It will serve to help your benevolent principle, if you at once abandon all idea of laying up large property for your children, or of accumulating a fortune to retire and live upon. I do not say that men while in the vigour of life should make no provision for their children, or for the infirmities of age; but I say, that they should consider themselves devoted to a benevolent end; and this principle should govern all their plans, gains, expenses, and benefactions.

As to acquiring a fortune to retire for purposes of self-indulgence, it is the severest deception that ever the adversary of human happiness played upon his covetous subjects. How selfish, how miserable it is, when a man has secured the means of rendering extensive benefit to the world, that he should retire from active service and lavish it upon his indolence and pleasure!

But he is usually punished. Scarcely ever is he a happy man, from the moment he retires to a life of inactive indulgence. He builds or buys his fine house, plants his gardens, gravels his walks, smooths his plats and lawns, makes his pools and fountains of water; stores his cellar with an abundance of the choicest wines; gets to him men servants and maidens; puts all things in order—and then he says, "I shall die in my nest, I shall multiply my days as the sand." But scarcely does one short month expire, before he begins to be discontented. Then does he say in his heart, as did the Frenchman who built the goodly mansion near Boston. Having made his fortune, erected his house, and gathered about him all the means of earthly enjoyment, he soon became uneasy, and wished to sell his place. "Why, what's the matter now?" said his friend, "don't you like your place?" "Oh, de place is well enough," replied the unhappy man in the French style, abating some profanity—"but I tell you, pursuit is de good; possession is de evil!"

And wherein does this differ from the very lesson taught us in the Bible, respecting one who lived almost three thousand years ago? "I made me great works; I builded me houses; I planted me vineyards: I made me gardens and orchards, and I planted trees in them of all kind of fruits: I made me

pools of water, to water therewith the young trees; I got me servants," etc. "Then I looked on all the works that my hands had wrought, and on the labour that I had laboured to do: and behold all was vanity and vexation of spirit, and there was no profit under the sun."

There is, however, it must be allowed, occasionally to be found a man of an indolent and pleasure-loving disposition, who has so educated himself to it, that anything like benevolent active effort has become a task, and who thus contrives to live wholly to himself upon his fortune, with a sort of oyster-like satisfaction. By that exclusiveness, towards which this form of selfishness always tends, such men soon lose their influence over society, and become to the world much the same as if they had gone to the grave. It is a kind of premature death; and for the good of the world, it is doubtless better that such should die than live.

Abandon, then, all idea of laying up a fortune with a view to the future gratification of pride, vanity, pleasure, or indolence. You cannot commit a greater or more fatal error. Determine to be actively employed in doing good, as long as you can. Value property and influence mainly in reference to this end. Should Providence ever lay you aside from your present employment, your benevolent ingenuity will still devise many ways by which you can make yourself useful. Our excellent mothers continue to knit stockings for their sons and grandsons, long after the infirmities of age have detached them from the more active duties of life. Do they not enjoy it? And if you are so happy as to learn the luxury of doing good, you will be able to find something for your heart and hand to do as long as you live, a thousand times more conducive to your happiness than indolence or selfish pleasure.

Man was made for action. Such is the law of his nature, that active benevolence is essential to his happiness. The inhabitants of heaven rest only from sin and suffering; as to employment, "they rest not day nor night." Determine to be actively employed in some benevolent way, as long as you live, and it will have an excellent effect on your present character; it will enlarge your heart, expand your vision, and happily modify all your plans and habits.

Expect to live and act for ever!—to

commit your body to the slumbers of the tomb only for a short night, that your soul may ascend to the higher acclivities of heaven, there to await the transformed and reanimated dust "clothed upon with immortality," to act with renewed and undying energy through eternal ages.

If called to any official station or duty, discharge it cheerfully and faithfully. Let it satisfy you to do all the good you can, and to let others have all the honour. This is true moral greatness. What a beautiful illustration we have of it in the most elevated of all Beings that ever lived on earth. He was willing to be the lowliest and humblest of all; he even washed his disciples' feet, saying, "If I then, your Lord and Master, have washed your feet; ye also ought to wash one another's feet. For I have given you an example, that ye should do as I have done to you. If ye know these things, happy are ye if ye do them."

Be artless, honest, straightforward; have a "single eye." If others speak against you, never mind it. But see that you give them no just occasion to do it; have a conscience void of offence; be sure that in the kindness and simplicity of your heart, you aim to do them and all men the highest good in your power, and all will come out well in the end. You will have obeyed the precept, "Be not overcome with evil, but overcome evil with good;" the truth will appear at last, and your character will shine like the sun in its full strength.

Be not dictatorial, opinionated, or self-willed; be not one of those troublesome bodies who must always have their own way, and who thrust their sharp elbows into every man's side who does not exactly join with them. In respect to your principles, you may be as firm as you please, provided they are good; but in respect to manner, modes, measures, I point you to the high example of one who, "for the gospel's sake, became all things to all men."

By "patient continuance in well doing," you may secure a character which will make your influence to be felt like the dew and the sunshine, on all the vineyard in which you dwell. No matter how humble your circumstances. Moral influence depends far less on these than most imagine. When men are sick, or in danger, or affliction, or mental trouble for their spiritual state, to whom do they flee? To the man highest

in office, or rank, or talent, or wealth? No. But to him who is known to be truly good. In other respects, he may be the obscurest man in all the place; but if he is known as a consistent, benevolent, devoted Christian, he is the one before all others to be sought unto by his fellow-beings, when most they need a friend. This proves that he has great moral power over them. They acknowledge it in the most effectual manner possible. He is continually putting forth a most benign influence. He is perhaps scarcely aware of it. He does not know how much good he is doing. Like the dew and the sun, his influence is silent, soft, sweet, powerful.

Yes, after all, the world *do* know what goodness is; they say, perhaps, little of the man who sustains this character among them, but they feel his power; they "take knowledge" of him that he "has been with Jesus." I wish you, my young friend, to seek such a character as this. You may do it. It may not be in your power to become great, rich, or eminently learned; but it is in your power to become what is unspeakably more valuable and important. Let me suppose you a professing Christian. If you are faithful and constant in duty; if by daily communion with God, in connexion with benevolent action, you keep your heart full of Christian benignity towards all men; if you are heavenly-minded through the week, as well as on the sabbath; if in all your contact with the world, you "let your light so shine before men, that they may see your good works, and glorify your Father which is in heaven"—it is impossible to declare the value and amount of the good which you may do, not only to the church and society with which you are connected, but ultimately to all the world.

True religion consists not only in keeping your heart and aim above the world, but in sympathizing with and relieving, as far as you can, all the sufferings and afflictions of your fellow-beings.—"Pure religion and undefiled before God and the Father is this, To visit the fatherless and widows in their affliction, and to keep himself unspotted from the world." The conferring of mere temporal benefits, is never to be substituted for the distinguishing and more spiritual duties of religion, but should if possible always attend them,

They are frequently the more obvious demonstrations of your kindness, and they serve to open for you a way to the hearts of the objects of your beneficence, through which you may pour the richer blessings of religion. Make it an object, then, as far as your time and means will allow, to enter the abodes of poverty and sorrow; to relieve the wants of the virtuous needy, as well as to rescue and save the vicious; to wipe away the tear of affliction, and soothe the sorrows of the widow and the orphan, by your sympathetic and kind attentions. Your labour will not be in vain. And when the hour of your own trial shall come, as to all it must, how happy will it be to be enabled to say with one of the best of men, "When the ear heard me, then it blessed me; and when the eye saw me, it gave witness to me; because I delivered the poor that cried, and the fatherless, and him that had none to help him. The blessing of him that was ready to perish came upon me; and I caused the widow's heart to sing for joy."—*Hubbard Winslow.*

OLD HUMPHREY ON PLAIN WRITING.

PLAIN writing prevents much confusion, vexation, and disappointment. *Write it plain*, appears at first to be but a homely piece of advice, but a little consideration may make it of more importance.

Had it been better attended to in one or two instances in which I have been concerned, it would have saved me much inconvenience. When I was a younger man than I now am, a hamper was addressed to me to be left at a friend's house about three miles from my abode. A fit of economy came upon me at the time, and I thought that, as the hamper was not very large, and as no one was likely to see me, it being almost dark, I might just as well carry it home myself, as give half a crown to a porter. I read the direction on the card, and swinging the hamper on my shoulder, walked at a pretty sharp rate. Before I had got half a mile, it began to rain, the keen edges of the hamper cut my shoulder sadly, and the exertion of moving quickly with such a burden put me all in a perspiration; but what tried me worse than all was, that my hands got so unaccountably sticky, that I could not tell what to make of it. On I went bustling through the rain, shifting the hamper every now and then from one

shoulder to another. By the time I got home I had had quite enough of my burden, but when I came to set it down and to take off my great coat, oh what a pickle was I in! Had any one poured a can of treacle down the back of my great coat, it would scarcely have been worse; the back, the shoulders, the sleeves, and my hands,—but it is of no use to attempt to describe what is beyond description.

Now what had occasioned all this? why a want of attention to the simple and useful advice, "Write it plain." The hamper contained a good sized gammon of bacon, two chines, some pork pies, and half a dozen large pots of red currant jam; and as the currant jam was rather thin, being full of syrup, the address card had written upon it, "Keep this side uppermost." Unfortunately this was written so small and so illegibly that I had not perceived it; the consequence was, that in swinging the hamper on my shoulder the bottom uppermost, and in hitching it from one shoulder to the other, the syrup had run out of the jam pots. The pies, chines, and gammon of bacon had come in for their share, but my great-coat was a perfect picture, and such a picture as I never wish to see painted again. Oh the wetting, the rubbing, the sponging that I had to make it any thing like decent to put on; but the very thought of it makes me uncomfortable, and therefore I will say no more about it, only that it impressed on my memory the good sense and good advice contained in the words, "Write it plain." It is a good thing to profit by the errors we fall into, and if by relating them to others, they too are induced to profit by them, it is a better thing still. But I have not yet done with the piece of advice, "Write it plain."

When I was a youngster, my father had a letter from his cousins, the Merridews, of York, to say that, if convenient, they and their two children would spend a few days at our house, but that they must have a reply by return of post; for if they did not come to us, they should go into Derbyshire. Now, as the Merridews were topping people, as well as very friendly, my father was very particular in not losing a post. A letter was written to say how glad we should all be to see them. I had the credit then of being a good writer; so my father gave me the letter to direct, first scribbling the address on a bit of paper. "Write it plain, Humphrey, write it plain," said he,

"that there may be no mistake." Unfortunately my father was obliged to go out, and a comrade of mine called in to ask me to accompany him on a very pleasant expedition, so that the letter was directed and taken to the post in a hurry.

Every preparation was made to receive the Merridews, but not one of them made their appearance. The house had been scrubbed, the chairs and tables rubbed. The curtains had been put up afresh, and day after day we all had our best clothes on, quite prepared for company. I got terribly tired, and my father thought himself somewhat ill used. At the end of a fortnight, came a letter with the York post mark upon it, and my father broke it open rather peevishly, saying, that if they did not mean to come, they might have had the good manners to send word a little earlier. I saw my father's countenance change as his eye glanced over the letter. "What can be the meaning of this?" said he, and then he read the letter to me, which was as follows:—

"Sir,

"Judging by your silence that a visit from us would be disagreeable, we decline troubling you with our company, and only regret that a want of attention, on your part, to common civility, in neglecting to reply to my letter, has so long deferred our visit to Derbyshire. Mrs. Merridew desires me to say, with her compliments, that she is happy in sparing you the great trouble and inconvenience our intended visit might have occasioned.

"I am, Sir, yours,

"NICHOLAS MERRIDEW."

Here was a pretty piece of business! Had my father lost fifty pounds, it would not have vexed him half so much; for he had been at York, and received the most hospitable attention from his cousins. I was certain that the neglect did not rest with me, having taken the letter myself to the post. So off my father set to the post-office to inquire, but came back just as wise as he went. The affair so vexed him that he could not sit down to write till the next day, when, just as he had finished a long letter to the Merridews, the postman brought him an inclosure from his Majesty's Post-Master General, with the unfortunate letter directed by me inside it. The mystery was now explained, and I was overwhelmed with confusion. In directing the letter, I had made the upper part of the Y in the word York rather small, and had turned the

bottom of it the wrong way with a flourish of my pen, so that nine out of every ten readers would have thought, as they did at the post-office, that it was intended for Cork, and not York. The unfortunate letter had been across the channel to Ireland and back again before it was inclosed to my father. You may be sure that I heard a good deal of this letter. Though my father wrote a long explanation of the affair to the Merridews, and even sent them the letter that I had so badly directed, it was months, if not years, before they were as cordial with us as formerly. So much vexation did I bring on others, and so much mortification on myself, by this affair, that the advice given me by my father, "Write it plain," is not likely to be erased from my memory.

If half the trouble, the mistakes, the anger, the ill will, and evil consequences that arise from illegible writing could be made known, we should certainly be more attentive when we take up the pen.

And now, shall I tell you why it is that I have said so much on this subject? The truth is that, notwithstanding my experience of the past, I have fallen into a sad habit of writing in a very slovenly manner; and, though truly ashamed of it, I find it by no means an easy matter to amend. Now it has struck me that some of my young friends, and for aught I know, some of my old ones too, may be in the very same predicament, and as it is pleasant to jog along in good company, perhaps they will be trying at the same time as myself to get the better of our common failing. Yes! yes! we must see what can be done; and perhaps the account that I have given of the hamper and the ill directed letter, may help us a little in our determination no more to annoy our friends, and to plague and perplex ourselves by illegible writing.

Let me close my remarks with one that may be useful to us all. The more important a communication is, the more plainly should it be expressed to prevent the possibility of an error. A mistake respecting a crown-piece may occasion a temporary inconvenience, but a mistake about a thousand pounds might produce inevitable ruin.

If this be true, and surely it is too self-evident to be doubted, how very thankful ought we all to be that the most important communication ever made to mankind should be so plainly expressed as it is!

The glad tidings of salvation in the gospel of Jesus Christ by faith in a crucified Redeemer, are published in our own tongue, printed so plainly on clear paper, that it is impossible to misunderstand them. Can we be too thankful, or rather can we be sufficiently thankful for this unspeakable advantage? Can we be too anxious, or can we be half anxious enough to seek and obtain that mercy which is so freely and so plainly proffered in the gospel?

MOLLUSCA.—No. IV.
THEIR USE.

To every creature the beneficent Creator has given some advantage. The free shells, as they are called, are directed by their inhabitants hither and thither in their pursuit of food; but are tenants of fixed shells left without provision? No! on the contrary, food comes to them; the continued motion of the waves, or the flowing of the tide, brings them a fresh supply of the little animals on which they subsist. Truly, "the eyes of all wait on thee, O Lord, what thou givest they gather; and thou satisfiest the desire of every living thing."

Molluscous animals, too, are a part of the provision made for various other creatures. Not only do the different species of walrus, inhabitants of the ocean, feed partly on shell-fish; but the orang-outang, and the preacher monkey, often descend to the sea to devour what they can find strewed on the shores. The former, it is said, feed in particular on a large species of oyster; and, fearful of inserting their paws between the open valves, lest the oyster should close and crush them, they first place a tolerably large stone within the shell, and then drag out their victim with safety. The latter are no less ingenious. Dampier saw several of them take up oysters from the beach, lay them on a stone, and beat them with another till they demolished the shells. Even the fox, when pressed by hunger, will eat mussels and other bivalves; and the racoon, whose fur approaches in value to that of the beaver, lives much on them, especially on oysters, when near the shore. We are told that it will watch the opening of the shells, dexterously insert its paw, and tear out its contents. Still, however, there is danger; for sometimes the oyster, suddenly closing, will catch the thief;

and even detain him till he is drowned by the return of the tide.

But the supply thus afforded is far more extensive. In some parts of England, shelled snails are considered to contribute much to the fattening of sheep.

Among birds, the Mollusca have also many enemies. Several of the duck and gull tribes derive from them, at least, a portion of their subsistence. The pied oyster-catcher takes its name from feeding on oysters and limpets; and its bill is so well adapted to the purpose of forcing asunder the valves of the one, and the raising the other from the rock, that Derham remarks, "The Author of nature seems to have framed it purely for that use." Several kinds of crows find here their food. A friend of Dr. Darwin's saw above a hundred of them, on the northern coast of Ireland, at once, preying on mussels. Each crow took a mussel up in the air, twenty or forty yards high, and letting it fall on the stones, thus broke the shell. Land shells furnish a few birds with a part of their sustenance, and the principal of these are the two well-known songsters, the blackbird and the thrush. They break those, on which they depend in great measure when winter has destroyed their summer food, by repeated strokes against some stone; nor is it uncommon to find a great quantity of fragments of shells together, as if brought to one particular stone for this very purpose.

Of fishes, molluscous animals are also the frequent victims. Thus it is said:

"The prickly star creeps on with fell deceit,
To force the oyster from his close retreat.
When gaping lids their widen'd void display,
The watchful star thrusts in a pointed ray;
Of all its treasures spoils the rifled case,
And empty shells the sandy hillocks grace."

So well indeed does the star-fish know how to succeed in this instance, and so destructive is he to numbers of these creatures, that every dredger who observes one of these animals, and does not tread on and kill it, or throw it on the shore, is liable to some penalty. When indeed we remember the vast and incalculable numbers of molluscous animals which crawl on the bottom, or swim on the bosom of the ocean; and the indiscriminating and almost insatiable appetites of the fish which every where traverse it, it may be reasonably concluded, that their utility is

very great in this respect, in the economy of nature.

Man is often indebted, moreover, to these animals for food. The poor inhabitants of the western isles of Scotland find their daily, and sometimes their only fare, in the periwinkles and limpets which so profusely stud the rocks of their shores.

In the isle of Skye, for example, it is said, there is almost annually a degree of famine, and here is found "the casual repast," as Pennant calls it, "of hundreds during part of the year." Captain Cook saw no appearance of the people of Terra del Fuego having any other food; "for though he says seals were frequently seen near the shore, they seemed to have no implements for taking them. The shell-fish are collected by the women, whose business it seems to be to attend, at low water, with a basket in one hand, a stick pointed and barbed in the other, and a satchel at their backs; they loosen the limpets and other fish, that adhere to the rocks, with the stick, and put them into the basket, which, when full, they empty into the satchel." To the abundance and consumption of oysters from various parts of the British coast, it is scarcely necessary for us to allude.

So much then for the inhabitants of shells; whose dwellings, like themselves bear ample testimony to Divine benevolence and wisdom.

"Above the earth, around the sky,
There's not a form, or deep, or high,
Where the Creator has not trod,
And left the foot-prints of a God."

We anticipate much pleasure in furnishing our readers with some papers on the structure of shells.

HOUSES OF THE VENEZUELAN.

Nothing could be simpler than the houses of the natives who lived in the wild and woody districts. The materials for building are all obtained from the forest, and every man builds his own house. The framework, or skeleton, is formed of poles, cut close at hand; these are let into the ground by sinking round holes, which are afterwards rammed in. Still smaller poles are lashed across the top of these for rafters. Wild cane, or the bamboo, split into shreds, is then

tied transversely across the rafters, and the whole is thatched with the leaves of the fan palm. The sides of the building are then closed in by tying similar shreds of bamboo, or wild cane, across from pole to pole, so as to form a sort of basket-work. Afterwards it is either plastered over on the outside with a mixture of earth, clay, and grass; or, if intended to be more permanent, it is lined within, as well as covered without, with the lattice-work and plastering, or it is boarded with narrow plank, formed by splitting the rind of the cabbage palm. If it be a place intended only for temporary purposes, then the walls, as well as the roof, are merely thatched with palm leaves, or a species of rush.

One or two low rough seats, or stools, a coarse earthen jar or two, a number of tortumas (calabashes) in the shape of basins and bottles, made from a kind of gourd which grows in the forest, nearly complete the furniture of these domiciles. A small cotton hammock or two are suspended across the room, and serve as sofa, settee, and couch; two or three long knives are stuck about the wall, an axe and a machette laid on the floor, and perhaps an ugly, coarse Birmingham musket, reared in one corner. For cooking purposes, a fire is made upon the ground, under a small shed, erected at a little distance. And it is under this shed that the females of the family spend a considerable part of the day, squatted on the ground, apparently doing nothing, or perhaps pounding the root of the cassava in a wooden mortar, with a wooden pestle, to extract from it by frequent washing, its poisonous qualities, before making it into bread.

In large towns, the cottages are somewhat better as it regards externals; squarer, more regular in shape, better plastered and whitewashed, but the furnishing is not very superior.—*Hawkshaw's South America.*

BOLDNESS.

It is commonly seen that boldness puts forth men before their time and before their ability. Wherein we have seen that many, like lapwings and partridges, have run away with some part of the shell upon their heads.—*Bishop Hall.*



Arabians sitting at their tent doors.

EASTERN SHEPHERDS.

In the time of Chandler, it was still the custom of eastern shepherds to sit at the door of their tents in the heat of the day. That traveller, "at ten minutes after ten in the morning," was entertained with the view of a plain full of booths, with the Turcomans sitting by their doors, under sheds resembling porticoes, or by shady trees, surrounded with flocks of goats. In the same situation the three angels found Abraham, when they came to destroy Sodom and Gomorrah, sitting under the porticoes, or skirts of his tent, near the door, to enjoy the refreshing breeze, and superintend his servants. It was not the hottest part of the day, when Chandler saw the Turcoman shepherds sitting at the doors of their booths; it was soon after ten in the morning: and when Abraham was sitting at his tent door, it might be nearly at the same hour. In the hottest part of the day, according to the practice of these countries, the patriarch had retired to rest.

The goats of the Turcomans were feeding around their huts; and if Abraham's cattle, which is extremely probable, were feeding around his tent in the same manner, it accounts for the expedition with which he ran and fetched a calf from the herd, in order to entertain his visitants.

In winter, the Arabians and their cattle lodge together: on this account, they encamp in valleys, or on the sea shore upon the sand, in order to avoid the inconvenience of mire; but the emirs or princes live in a very different way: they have always two tents, one for themselves, and the other for their wives,

besides a number of small ones for their domestics, together with a tent of audience. In the same style of rustic magnificence, the patriarchs seemed to have lived; for Abraham and Sarah occupied separate tents, as did Isaac and Rebecca; and from them, it is probable, the custom descended to the Arabian shepherds of modern times.—*Parton*.

AN INOFFENSIVE MAN.

THE conversation at my uncle Barnaby's table, one day happened to turn on the intended marriage of my cousin Ellen, Frank's eldest sister. A gentleman present spoke in the highest terms of Ellen, as a most amiable and accomplished young woman. He expressed his hope that in the contemplated union she might enjoy as much happiness as she was likely to confer. He said, he had not the pleasure of knowing Mr. Mortimer; but, turning to my uncle, added, "I hope, sir, the match is entirely satisfactory to you?" "Very much so," replied my uncle. "Mortimer is an excellent, I may add, an inoffensive man, as much so as any person with whom I am acquainted."

"That is but negative praise," said Mr. Hamilton, the gentleman who had introduced the subject. "I should exceedingly regret to see so fine and sensible a young woman, as Ellen Tatnall, throw herself away on a harmless noodle. But is it not very remarkable, that men of talent are frequently known to choose women of inferior understandings; and that very superior women consent to tie themselves for life to mere dolts in point of intellect and acquirement?"

"True," said another gentleman present; "I have often grieved, and often blushed, for those ill associated matches, in which one party is utterly incapable of appreciating the merits of the other; and where no community of tastes and pursuits can possibly subsist. A particular friend of mine, a man of fine talents, and highly cultivated mind, has made an entire sacrifice of domestic happiness by marrying a beautiful simpleton: harmless, indeed, and kind-hearted; but incapable of half an hour's rational conversation with her husband, and utterly unqualified to educate his children. For want of an intelligent companion to share his fireside, the poor man is completely confined to his library, or compelled to go abroad to seek society."

"Poor man, indeed!" said my uncle; "and yet I know not whether pity is justly due to the man of superior intellect, who marries a fool. It is a matter in which a person, possessing even a moderate portion of common sense, cannot be deceived. Artfulness may conceal, and love may be too blind to discover defects in temper or deficiencies in education and manners; but a fool cannot open his or her lips without proclaiming the fact. Folly betrays itself, and cannot be hid; and the man who, for the sake of a pretty face, or a full purse, attaches himself to a woman void of understanding, richly deserves all the dissatisfaction and mortification to which he has exposed himself."

MR. H. He certainly does: and must we award the same meed of blame, without pity, to the highly gifted female, who with a more acute and delicate perception, and finer sensibilities, falls into the same mistake? At all events, it is matter of deep regret that such a surmise should rest on the amiable and talented Ellen Tatnall."

UNCLE. My dear sir, what surmise? I should indeed most deeply regret any well founded surmise that could lower, in my esteem, the object of my dear niece's tender affections. I hope I have not been misapprehended, as intending to imply a disparaging opinion of him. I consider him as one of the excellent of the earth.

MR. H. Yes; you spoke of him as an "inoffensive man:" the idea conveyed to my mind was that of a pious simpleton.

UNCLE. It is a pity that words, by their conventional use, should be so far

removed from their original and legitimate meaning; and I cannot but regard it, with a distinguished writer, whom I have the honour to call my friend, "an evidence of the degeneracy of the age, that an inoffensive man is an expression used generally to intimate some imagined intellectual deficiency; as if there could be no good sense without cunning and villainy," or at least without violence and turbulence of spirit. Inoffensiveness is not so disparaged in the sacred volume. It is enjoined on Christians as a necessary evidence of their filial relation to God, and as an essential qualification for that exemplary usefulness, after which every good man aspires—a recommendation of the principles of the gospel to those who manifest indifference to it, if not prejudice against every other species of evidence in its favour. "That ye may be blameless and harmless, the sons of God, without rebuke, in the midst of a crooked and perverse nation, among whom ye shine as lights in the world; holding forth the word of life," Phil. ii. 15, 16. Call, if you please, this commendation of harmlessness a negative praise. It is, however, a praise which belongs not to many persons of exalted genius, or at least of high intellectual attainments, and of high flown religious profession. For my part, I am inclined to reckon it an attainment of no mean order; and one that discovers the exercise of sound good sense and genuine piety, to maintain a conscience and a deportment void of offence; a blameless and lovely consistency of character with the dictates of reason, the claims of justice, and the requirements and principles of Christianity. I believe it is much easier to be brilliant than to be inoffensive."

"I stand corrected," said Mr. Hamilton. "An inoffensive man is an estimable character; and I rejoice in assigning this character to the chosen of my amiable young friend, Miss Tatnall. You convey no disparaging reflection on his intellectual powers and attainments."

Here the conversation took a different turn; but as Frank was jealous for the honour of his sister's choice, and as the attention of both of us was awakened to the subject of harmlessness of character, we introduced it again at the breakfast table, hoping to elicit some further remarks from my uncle. In this we were not disappointed. The following is the substance of our conversation:

FRANK. I have been thinking, uncle,

a great deal about harmlessness and inoffensiveness of character. Will you please to tell me in what respects you particularly applied the characteristic to Henry Mortimer?

UNCLE. I will answer your question, Frank, by another. Did Henry Mortimer ever give you offence or pain?

FRANK. Oh, no, uncle: he is so uniformly kind and agreeable, I never experienced any thing but pleasure in his society.

UNCLE. Do you recollect any instance in his conduct which was calculated to wound any person; or at which any person could justly take offence?

FRANK. No; indeed I do not. He is kind to every body, and every body seems to love him.

UNCLE. Have you ever seen him act in such a manner as surprised and struck you with an uncomfortable sense of its inconsistency with his general character and the expectations you had formed of him?

FRANK. No, uncle; I never did. Did you?

UNCLE. Certainly not. He is one on whom, as much dependence can be placed as on any fellow-creature. I am satisfied that having taken up certain principles, he will act in conformity with them. Have you ever seen in him a selfish disregard, or inconsideration of the tastes, feelings, and claims of others?

FRANK. No; but I have often seen him deny himself to give pleasure to others.

UNCLE. Have you ever had reason to suspect him of duplicity, or insincerity? that in performing a seemingly kind action, he was in reality serving some selfish purpose?

FRANK. No, no, uncle; I am sure he would abhor the thought of it?

UNCLE. Well, if all these features belong to his character, I think he may justly claim that of an inoffensive man.

FRANK. Yes, uncle; I am sure he may. I wish, as you said yesterday to Mr. Hamilton, that the phrase was not so commonly applied to weak, silly people, of whom the most that can be said is, that they are not mischievous or quarrelsome people, who, though they do no harm in the world, do no good.

UNCLE. I very much question, Frank, whether there are any such people, and if there are, they cannot lay claim to the character of inoffensiveness. Apathy and indolence are exceedingly offensive,

provoking and injurious. In a world where there is so much good to be done, and so much allotted to the share of every individual as his positive duty, I do not see how any one can fail to discharge that duty without incurring positive guilt. The slothful and unprofitable servant is justly condemned as "wicked," Matt. xxv. 18. 26. In speaking of an inoffensive man, I really think we must entirely banish from our minds the idea of an indolent or useless one. A speech of captain Tankerville's happened to have been heard and recollected by me, though no one else in the company seemed to have taken much notice of it. By the way, *he* can never be called an inoffensive man, who says silly things in the presence of children. Incalculable mischief may result from it; injury which is not rendered the less criminal by the inconsideration with which it is inflicted.

"Uncle," said I, "the captain said, it was a libel upon a gentleman to call him inoffensive. An inoffensive man was no better than the ass in a sand cart, the horse in a mill, or the turnspit-dog at a kitchen fire."

UNCLE. All very respectable animals in their places, because they are useful according to their own abilities and opportunities. I wish every gentleman were as useful and honourable. A man, however, is better than a beast, because he is endowed with higher powers, and if he employs them aright, he does so upon noble principles; and the higher our capabilities, if they are improved, the greater is our sphere of usefulness, and our meed of honour. But, beware, my dear boys, of admitting the world's false principle which allies, if not identifies talents with wickedness, and imbecility with goodness. It is true that they are sometimes seen in connexion, but not always. Some men seem to have talents for wickedness, and for nothing else; and some highly gifted men are as harmless as if they had no power of doing mischief; and, again, to use the words of a writer already quoted, "inoffensiveness is peculiarly attractive, when it is combined with qualities that would render a man dangerous without it: where the sublime is softened by the beautiful; where the simplicity of the babe, tempers the wisdom of the sage." My venerable friend, Dr. Reynolds, is a fine example of this. It is impossible to come in contact with him, and not have

the feelings both of reverence and love called forth; reverence for his evident superiority of character, and love for his meekness and benignity. Are you not conscious of such feelings?

FRANK. Yes, uncle; it is impossible to be uncomfortable in his society; for though, as you say, his excellences command our reverence, there is nothing about him to discourage or confound. His gentleness and kindness of manner seem to invite and encourage to the imitation of his example, though it be but at a humble distance. I have experienced somewhat the same kind of feelings when in company with the noble lord who visited you lately.

UNCLE. Yes; he is another of my inoffensive men. In each of the three individuals to whom we have alluded, there is nothing to excite, in the mind of a stranger, disgust or prejudice against the order of society to which he belongs; but, rather, what would give a favourable prepossession for his sake. I will venture to say, that should you be introduced to a barrister, a clergyman, or a peer, whose manners were coarse, haughty, or repulsive, you would be disappointed and shocked, not merely at the incongruity of the thing itself, but on account of the favourable association established in your mind, between those models of society, and the characters of Henry Mortimer, Dr. Reynolds, and my noble friend.

FRANK. Yes, uncle, I am sure I should. Well, I am glad this conversation was brought up. I hope it will teach me not to think meanly of an inoffensive man; but rather to aspire after the character as truly honourable.

SAMUEL. I wish uncle would be so kind as tell us exactly what he means by being inoffensive, so that we may be able clearly to understand and remember it.

UNCLE. You have assigned me no very easy task, Samuel. There is no difficulty in perceiving when persons act offensively, nor perhaps in pointing out how they might and ought to have acted differently. It is not so easy to lay down abstract rules for inoffensiveness. Nor indeed do I think I could do it without calling to my mind some actual examples of transgression. Well, we will endeavour to recollect a few particulars.

Sincerity is the basis of all real excellence, and he who would be inoffensive, must, in the first place, be sincere; like

Nathanael, "an Israelite indeed, in whom is no guile," John i. 47; or, like a greater than Nathanael, "who did no sin, neither was guile found in his mouth," 1 Peter ii. 22. This is the invariable characteristic of the harmlessness recommended in Scripture. Without it, blandness of manners, however specious, is but superficial and temporary. Venom is treasured within, which only waits an occasion to act as offensively as can be imagined. "In malice be ye children; but in understanding be ye full-grown men," 1 Cor. xiv. 20. "I would have you wise unto that which is good, and simple concerning evil," Rom. xvi. 19. The great apostle of the Gentiles, who could with holy boldness appeal to those among whom he had laboured, as to the holy, just, and unblamable manner in which he had behaved himself among them, 1 Thess. ii. 10, continually cherished the testimony of conscience, that in simplicity, and godly sincerity, not with fleshly wisdom, but by the grace of God he had had his conversation in the world," 2 Cor. i. 12, and especially among them. His great solicitude and prayer for his beloved flock was, that they might "be sincere and without offence till the day of Christ," Phil. i. 10; and his great apprehension was, lest their "minds should be corrupted from the simplicity that is in Christ," 2 Cor. xi. 3. Remember, then, if you would be inoffensive, you must be sincere.

An inoffensive man is one who maintains the rule over his *temper*. The man of peevish, irritable, malignant temper is continually giving and taking offence.

SAMUEL. Do you think, uncle, that people can help their temper?

UNCLE. Yes, Samuel, undoubtedly I do. People may boast of having uneasy tempers, or excuse their violent and improper conduct, by laying the blame on a naturally bad temper: and no doubt there is a difference in natural temper; but this I am sure of, true Christian meekness is not the natural product of the corrupt heart of man: it is implanted there by the Holy Spirit of God; and it is a bounden duty to cultivate its growth by constant watchfulness and prayer. He who conscientiously does so, whatever may have been his natural temper, will find himself enabled, by Divine grace, in this respect to maintain a conscience void of offence. Re-

member, my boys, a hasty, unkind, resentful word, though it may be repented of and forgiven, can never be recalled; and the person who suffers himself to utter such words, however speedily and deeply he may regret his fault, and endeavour to make reparation, has forfeited the character of an inoffensive man. If ever, therefore, you should be tempted to speak or to feel unkindly, endeavour to bring before your mind the lovely example, and pray that you may have grace to imitate it, of Him whose meekness was never ruffled; who, when he was reviled, reviled not again; when he suffered, he threatened not; and in all this he left us an example, that we should follow in his steps, 1 Peter ii. 21—23. Cultivate a meek and quiet spirit, which in the sight of God is of great price, 1 Peter iii. 4. You find I am quoting again from the writings of the apostle Peter. In them there is much about meekness. Doubtless he wrote under the immediate direction of the Spirit of inspiration; but as all the sacred writings display something of the character of the penmen, it seems as if, being conscious that in his early life his rash and impetuous temper had been a frequent occasion of offence; and having, as he became wiser and more matured, and mellowed in Christian experience, been more and more deeply impressed with a sense of the value and importance of meekness, he was hence solicitous to recommend it to the attention and cultivation of others. My uncle proceeded to observe, that if we wished to cultivate a meek and inoffensive temper, we must pay attention to trifles.

Frank took from his pocket a small volume, and begged permission to read a few lines, which he justly thought illustrative of the subject. They are from the pen of Hannah More, in a poem on Sensibility.

"Since trifles make the sum of human things,
And half our misery from our foibles springs;
Since life's best joys consist in peace and ease,
And though but few can serve, yet all may please.

O let the 'ungentle spirit learn from hence,
A small unkindness is a great offence;
To spread large bounties, though we wish in vain,

Yet all may shun the guilt of giving pain."

My uncle expressed himself pleased with the aptness of Frank's quotation, and went on to remark—

An inoffensive man must be a profi-

cient in the *government of his tongue*: for the tongue is a frequent cause of offence. How often has an unkind, a hasty or an unconscious word given pain to beloved friends! How offensive is the haughty and contemptuous speech of a superior in station, and the pert reply of a dependent! Hence, in the lovely code of Christian morals, the parent is directed not to provoke his children to wrath, Eph. vi. 4; Col. iii. 21; the master is enjoined to forbear threatening, Eph. vi. 9; the child is taught to cultivate that honour and reverence which would secure a suitable and respectful manner of speaking; and the servant is forbidden to answer again, Titus ii. 9.

The speech of levity, frivolity, and folly, the language of discontent or ungrateful murmuring, cannot but be grievous and offensive to the wise and good; yet how apt are we all, in one way or other, thus to transgress! Too often, like David, we have "said in our haste," Ps. cxvi. 11, words for which we have afterwards seen occasion to apologize. If we were duly alive to this, we should, like Asaph, check our improper thoughts, lest they should break out into words, and grieve or injure others. "If I say, I will speak thus, behold, I should offend against the generation of thy children," Ps. lxxiii. 15. We should take heed to our ways, that we sin not with our tongue, Ps. xxxix. 1; and we should beg of God to set a watch before our mouth, and to keep the door of our lips, Ps. cxli. 3; and, "if any man offend not in word, the same is a perfect man, and able also to bridle the whole body," James iii. 2.

FRANK. Oh, uncle, I begin to fear that the character of an inoffensive man is very rare; and that splendid talents, and detached acts of virtue, are far more common and easy than the attainment of that despised quality of inoffensiveness.

UNCLE. I am quite of your opinion, Frank. One thing, however, you must bear in mind, when we speak of inoffensiveness, in any fallen creature, it must be in a comparative and qualified sense; for "there is not a just man upon earth that doeth good, and sinneth not," Eccles. vii. 20; but, in many things, we all offend, James iii. 2. Nothing more can be said of the very best of men, than such is his habitual desire and disposition: perfection of attainment belongs not to this world.

FRANK. And yet there is a real and visible difference. Some people seem to live only in mischief and offensiveness, while others are harmless, benevolent, and excellent; no doubt they have their faults, and lament over them; but it would be difficult for others to point them out. I know more than one such character.

UNCLE. I think you do, Frank; and I hope it will be your constant endeavour to resemble them. Well, to lay claim to the character of inoffensiveness, a man must be possessed of a right spirit, a spirit of humility, forbearance, benevolence, and candour; for the proud man will be continually giving offence, by trampling on the claims, and wounding the feelings of others, in order to secure that distinction which he supposes is due to himself. The man of an angry spirit will find and make occasions of offence, whether or not they exist; while a spirit of Christian forbearance would lead us to overlook many grievances; to suffer long, and be kind; to be gentle, courteous, and patient to all men; and enable us to fulfil and exemplify the wise resolution:

"I'll not willingly offend,
Nor be easily offended;
What's amiss I'll strive to mend,
And endure what can't be mended."

Frank again quoted from Hannah More.

My uncle then proceeded:

"The mild forbearance at a brother's fault,
The angry word suppress'd, the taunting thought
Subduing and subdued; the petty strife,
Which cloud the colour of domestic life;
The sober comfort, all the peace which springs
From the large aggregate of little things;
On these small cares of daughter, wife, or friend,
The almost sacred joys of home depend."

Well, then, a spirit of selfishness is continually embroiling a man in contentions and litigations about what he shall grasp, and what he shall hold, while his own interests are made paramount to the interests and happiness of all the world beside. Such a man is any thing rather than inoffensive; no, if we would attain this character, we must take a benevolent pleasure in the happiness of others, and by sometimes forgetting our own, we shall find that we have most effectually promoted it. A truly benevolent man is in a constant good humour with himself and all around him.

Then a spirit of candour is necessary to regulate our conduct towards those who differ from us in sentiment or prac-

tice. Bigotry is always quarrelsome; but candour and liberality, without any compromise of truth, will render us inoffensive, by teaching us to give credit for sincerity and rationality even to those who differ from us; to abstain from rude and illiberal interference with, or reflection on their practices, and even their prejudices; to cherish good-will to them in all things; cordially to co-operate with them, as far as we consistently can do so; and, if really called upon to differ from them, to take care that we speak the truth in love, and that we are actuated not by a desire for victory, but by a love of truth, and that cordial love of our brother, which a genuine love of truth would dictate. One fruitful source of offence in society is the habit of indiscriminate and often undeserved censure of the principles, conduct, and motives of those who differ from us, especially in politics or religion; and such a habit the Christian and the gentleman should carefully guard against, if he wishes to maintain a conscience and a deportment void of offence.

FRANK. I am always sorry when people get to disputing in company. Instead of convincing each other, they generally leave off with worse feelings, and more bitter prejudices, than they began.

UNCLE. Yes; I have seen a whole company set scowling at one another, and almost ready to fulminate anathemas against friends whom they really love and esteem, by one ill-natured and ill-timed remark of an angry zealot, especially if the remark was clothed in the garb of ridicule or sarcasm. This reminds me of another feature in the character of the inoffensive man. If he happens to possess wit, he will be sure to chasten it by virtue. One who possesses a talent for repartee, and lays the reins on the neck of his imagination, and gives utterance to his sallies as fast as they present themselves, will not be long without giving offence, and inflicting wounds which he may bitterly regret, but cannot easily repair; and

"Who, for the poor renown of being smart,
Would plant a dagger in a brother's heart?"

Here Frank again took out his book and read the following passages from the same amiable author. With some hesitation I ventured to repeat a few lines, which I thought applicable, from the beautiful poems of Cowper. In general

I found it much better, when in company with my uncle and Frank, to listen to what they had to say, than to interpose remarks of my own. When I did speak, they treated me with candour and encouragement; and on that occasion particularly commended my apposite quotation.

"The hint malevolent, the look oblique,
The obvious satire, or implied dislike;
The sneer equivocal, the harsh reply,
And all the cruel language of the eye;
The artful injury, whose venom'd dart
Scarce wounds the hearing, while it stabs the heart;
The guarded phrase, whose meaning kills; yet told,
The listener wonders how you thought it cold.
Small slights, neglect, unmixed perhaps with hate,
Make up in number what they want in weight;
These, and a thousand griefs minute as these,
Corrode our comfort, and destroy our ease."

"What lively pleasure to divine
The thought implied, the hinted line;
To feel allusion's artful force,
And trace the image to its source:
Quick memory blends her scatter'd rays,
Till fancy kindles at the blaze;
The works of ages start to view,
And ancient wit elicits new;
But wit and parts, if these we praise,
What noble altars should we raise!
Those sacrifices could we see,
Which wit and virtue makes to thee;
At once the rising thought to dash,
To quench at once the burning lash;
The shining mischief to subdue,
And lose the praise and pleasure too.
Though Venus' self, could you detect her,
Imbuing with her richest nectar
The thought unchaste; to check that thought,
To spurn the praise so dearly bought,
This is high principle's control!
This is true continence of soul!
Blush, heroes, at your cheap renown,
A vanquish'd realm, a plunder'd crown.
Your conquests were to gain a name:
This conquest triumphs over fame:
So pure its essence, 'twere destroy'd,
If known; and if commended, void.
Amidst the brightest truths believ'd,
Amidst the fairest deeds achiev'd,
Shall stand recorded and admir'd,
That virtue sunk what wit inspir'd."

H. MORE.

"Is sparkling wit the world's exclusive right?
The fix'd fee simple of the vain and light?
Can hopes of heaven, bright prospects of an hour,
That come to wait us out of sorrow's power,
Obscure, or quench a faculty, that finds
Its happiest soil in the sereneest minds?
Religion curbs indeed its wanton play,
And brings the trifles under rigorous sway;
But gives it usefulness unknown before,
And, purifying, makes it shine the more.
A Christian's wit is inoffensive light;
A beam that aids, but never grieves the sight:
Vigorous in age, as in the flush of youth,
'Tis always active on the side of truth;
Temperance and peace insure its healthful state,
And make it brightest at its latest date."

COWPER.

After these quotations had been made and approved, my uncle proceeded to observe, that an inoffensive man would be observant of his *habits*. He is not an inoffensive man who selfishly en-

grosses the fireside seat, or stands in front of the fire on a cold day; who speedily appropriates an undue share of the greatest delicacy at table; who exposes a whole company to inconvenience, or breaks up an agreeable party for the sake of some personal indulgence; who insists on having all his whims gratified, whatever expense, inconvenience, or fatigue may be thereby entailed on others; who obtrudes subjects of conversation which are either offensive or uninteresting to others; who, in a word, fills up the character of a selfish man. A selfish man cannot be inoffensive.

The same remarks my uncle applied to persons of indolent and unpunctual habits. He who does not discharge his own duties, and fulfil his own engagements in due time, must be continually clashing with those of others; and as it is really injurious, so it is justly offensive to those who know the value of time, to be robbed of it by the indolence and irregularity of others.

Habits of discontent and ingratitude were alluded to as forfeiting the character of an inoffensive man. He who richly shares the undeserved bounties of Heaven, and when all around him kindly exert themselves to serve, and please, and make him happy, indulges a fretful, repining, murmuring spirit, both sins against his best Benefactor, destroys his own peace, and renders himself offensive to those in whose eyes he ought to make himself amiable, by a spirit of gratitude and cheerfulness.

My uncle next remarked, that for a man to be inoffensive, he must maintain uniform *consistency* with his religious profession. The inoffensive man, he said, will be sacredly fearful of injuring the honour of religion, and causing the way of truth to be evil spoken of; he will be tender of the purity of another's mind, the peace of another's conscience, and the honour of another's name. It is enjoined on Christians to "be harmless and holy;" to "give none offence, neither to the Jew, nor to the Gentile, nor to the church of God;" to abstain from every thing whereby a brother stumbleth, or is offended, or is made weak; "to take heed that they offend not one of these little ones;" to "follow the things which make for peace, and the things whereby one may edify another;" and to have their conversation in the world honest and exemplary; that whereas the men of the world speak

against them as evil-doers, they may be constrained, by their good works which they behold, to glorify God in the day of visitation. Those professors of religion who cause divisions in the church, of whom their ministers must with a sigh warn the young disciple to avoid their society, and not to imitate their example; and of whom the world may tauntingly inquire, What do ye more than others? manifest, too plainly, that they have no claims to the character of inoffensiveness; perhaps they may be inclined to despise and think meanly of it, and to overlook or evade the application of that awful sentence, which appears evidently pointed at them, "It must needs be that offences come; but woe unto that man by whom the offence cometh!"

My uncle concluded the conversation by reading a few lines from the book he had already referred to, Jay's *Life of Winter*.

"It has been justly observed, 'the craftiest villain is the greatest fool, and the harmless Christian is the wisest man.' It is true that inoffensiveness and talents do not always go together, neither do wickedness and wit; a man of inferior endowments, with an honest and good heart, is a far more valuable character than one of greater capacities who, while he has the wisdom of the serpent, has the poison too. Call this quality, if you please, even an infantile property, provided you remember a piece of history." 'At the same time came the disciples unto Jesus, saying, Who is the greatest in the kingdom of heaven? And Jesus called a little child unto him, and set him in the midst of them, and said, Verily I say unto you, Except ye be converted and become as little children, ye shall not enter into the kingdom of heaven.' So much more valuable in his followers, and in his judgment, are the simplicity and innocency of a child, than the coruscations of intellect, the speculations of philosophy, the intrigues of politicians, and the exploits of heroes."

I am happy to close by saying, after twenty-five years of intimate acquaintance with my cousin Mortimer, that while I never saw any reason to impeach his understanding, taste, education, or manly spirit; his lively deportment, happiness in the family circles; his usefulness in the church; the happy influence of his example; and the universal respect and love which he at-

tracted wherever he is known, fully prove, that he has not forfeited, nor has he reason to be ashamed of the character of AN INOFFENSIVE MAN. C.

THE EMPEROR OF CHINA AND HIS COURT.

(Continued from page 185.)

OF the private life of the emperor we know very little. The only foreigners ever enabled to observe the domestic habits of a Chinese monarch were the Jesuits. They saw, however, only one, Kang-he, and he differed from all his successors in frequently appearing in public. The Chinese monarchs appear very little, however, in public, always regarding it the best policy to withdraw from public gaze, and thus inspire the people with the greatest awe. Most of their time is spent in their harems, amongst women and eunuchs. The charms which constitute the pleasures of civilized life are little known to these exalted personages. Many a farmer among us lives more comfortably than does the great monarch of China. His table is by no means splendid, though beset with birds' nests and other gelatinous substances; He drinks a wine made from sour mare's milk, which would not be very palatable to us. There is nothing in his common dress or manner of living which might distinguish the emperor from a wealthy Chinese merchant. He still affects the Tatar customs, sits cross-legged upon a carpet, and at least in outward appearance leads a very hardy life.

Gladly would we introduce the reader into the imperial palace, and exhibit to him the abode of the great monarch, if this were not forbidden ground. It consists of a very great number of buildings and long rows of courts, galleries, and gardens, which are in nothing distinguished from other Chinese houses, except by their vastness and the yellow tiles upon their roof, and numerous dragons in bass-relief. One has to pass eight courts before he can arrive at the apartments of the emperor. We give the description in the words of the Chinese missionaries.

"The palace, which shines with carving, varnish, gilding, and painting, stands upon a kind of platform paved with large square pieces of a beautiful green marble, polished like glass, and laid so close together, that it is not easy to distinguish the joinings. At the entrance of

the great hall, there is a door, which opens into a large square room paved with marble, where the emperor was sitting on an estrade, after the Tatar fashion. The beams of this room were supported by wooden columns, varnished with red, and fixed in such a manner in the wall that they were even with its surface. We performed the usual ceremonies, that is, we ranged ourselves in a line facing the emperor, and fell on our knees three times, bowing every time to the ground. In receiving these marks of our respect himself, he did us great favour; for when the mandarins of the six sovereign courts come every fifth day, on the first day of the year and on the emperor's birth-day, to perform this ceremony, he is scarcely ever present; he is even at some distance from the palace when they pay him this homage. After we had performed this duty, we approached his person, kneeling on one side, and in a line; he asked us our names, ages, and country, and entertained us with a sweetness and affability, which would be thought surprising in any prince, but was much more so in the emperor of China.

"It ought to be stated, that this series of courts is all on a level, and ranged in a line. The collection of buildings is confined and uniform, interspersed with pavilions, galleries, colonnades, balisters, stair-cases of marble, and a multitude of varnished roofs, covered with yellow tiles so bright and beautiful, that when the sun shines on them they look as if they were gilt with gold. If to these we add the courts that have been made on the wings for offices and stables, the palaces of the princes of the blood, with those of the empress and of the women; the gardens, ponds, lakes, and woods, in which are kept all sorts of animals, the whole will appear surprising.

"Of the emperor's palaces of pleasure at Yuen-ming-yuen and Jehol, we have already spoken in another part of the work. It is there that he spends the happiest time, freed from the cares of government, and living entirely for his own pleasure.

"On leaving the palace, the emperor, carried in a sedan chair, is preceded by the princes and nobility on horseback, the prime ministers and presidents of the six boards marching before him. These are followed by twenty men bearing yellow flags embroidered with dragons,

twenty others with large umbrellas of the same colour, which have a broad fringe around them, and twenty fan-bearers. Then come the life-guards, (Hya,) likewise clothed in yellow, and wearing a kind of helmet, armed with a javelin or halberd, gilt and adorned with the figure either of the sun or moon, or of some animal. The emperor is carried by twelve men, all dressed in yellow, and accompanied by numerous bands of musicians to grate his ears with their noise. In ordinary excursions, there is less pageantry, and the retinue is much smaller."

One of the missionaries describes an imperial procession to the temple dedicated to Teén, in the following manner: "It was headed by twenty-four drummers, and as many trumpeters. Next to them were an equal number of men armed with red varnished staves, seven or eight feet long, and adorned with gilded foliage. Then followed a hundred soldiers carrying halberds, ending in a crescent, and gilded at the end. Then four hundred great lanterns finely adorned, and four hundred torches made of wood, which burns for a long time, and yields a great light; two hundred spears, some set off with flowing silk of various colours, others with tails of panthers, foxes, and other animals; twenty-four banners, on which are painted the signs of the zodiac; fifty-six other banners, exhibiting the fifty-six constellations into which all the stars are divided; two hundred fans, supported by long gilded sticks, painted with diverse figures of dragons, birds, and other animals; twenty-four umbrellas, richly adorned, and a beaufet, carried by officers of the kitchen, and furnished with gold utensils, such as basins, ewers, etc. The emperor followed on horseback, with a grave majestic air, pompously dressed; on each side of him was carried a rich umbrella, large enough to shade both him and his horse. He was surrounded with ten white horses led, whose saddles and bridles were enriched with gold and precious stones; a hundred spear-men, and the pages of the bed-chamber.

"After which appeared in the same order the princes of the blood, the kings, the principal mandarins, and the lords of his court, in their habits of ceremony; five hundred young gentlemen belonging to the palace, richly clad; a thousand footmen in red gowns, embroidered with

flowers and stars of gold and silver. Then thirty-six men carried an open chair, followed by another that was close and much larger, supported by a hundred and twenty chairmen; lastly, came four large chariots, two drawn by elephants, and the other two by horses covered by embroidered housings. Each chair and chariot had a company of a hundred and fifty men following it for its guard. This procession was closed by two thousand civilians, and as many military mandarins, in magnificent habits of ceremony."

This is the description of a panegyrist, from which we shall detract nothing. But if we must abate from it as much as from the procession of mandarins, which are represented by the same compiler as exceeding in splendour every thing known, this will make but a sorry appearance.

The emperor often gives a public repast at his palace, to which a certain class of persons are invited. The most celebrated is, perhaps, the invitation of old people, when the emperor himself serves, in order to render honour to old age. The literati of the highest degree are also regaled in the palace, after having acquired their rank, and partake, under the sound of music, of the imperial bounty. In all these cases, the emperor is the principal agent, and the honour of being thus admitted to his presence is the richest compensation for all labour and toil. His treatment of foreign ambassadors has been so frequently described, that it is quite superfluous to dwell on it here. Thus much, however, may be said, whatever splendour can be shown is displayed on these occasions, and foreigners have then an opportunity of seeing the Chinese court in all its glory.

The most manly pastime in which the emperor engages is the royal hunt, which takes place during autumn. It more resembles a campaign, on account of the large number of soldiers who accompany the monarch, than a mere pleasure excursion. The animals being inclosed by surrounding hunters, become a very easy prey to the imperial sportsman. This custom was introduced in order to inure the soldiers to fatigue, and maintain in them a spirit worthy of the sons of the desert. Like many other good institutions, it has now almost fallen into disuse.

Kang-he was the first and almost

only emperor who made extensive tours in the provinces, though he never crossed the Yang-tse-keang. This laudable endeavour to observe every thing with his own eyes, and to judge of the nation by having intercourse with it, seems now to have been entirely discontinued. The emperor is seldom heard of beyond Peking and Jehol.

The pilgrimage to the imperial tombs is still occasionally performed with very great pomp. All the most influential grandees accompany the emperor thither, and likewise pay their devotion at the graves of the grandsires of their master. Such expeditions more resemble the march of a great army than a mere peaceful procession. The emperor in general divests himself from all cares as long as he dwells in the land of his forefathers, and enjoys rural sports with all the glee of a Tatar. The present generation, however, becomes more and more fond of the harem, and we fear that in the next reign the pilgrimage will be performed by proxy.

A Chinese emperor has the power of appointing a successor, which he does without the least regard to primogeniture. He may entirely overlook his offspring, and choose a stranger. So great is this prerogative, that the least advice upon the subject is considered a seditious speech. According to ancient regulations, the emperor prays silently to Heaven and his ancestors, that they will guide him in his choice. The person thus elected has his name inscribed upon a piece of paper, which the emperor carefully hides. It has frequently happened that the presumptive heir has been suddenly taken away by death or proved unworthy of the high calling. In such case a new choice is made, but, if we may credit the emperor's words, never communicated even to the most confidential persons. The emperor's own choice is considered so sacred, that there is not on record one instance of a struggle for power. All the princes of the blood implicitly yield the crown to that fortunate brother, who can prove that he was elected. In case of a regency, the titular guardians, either of the prince or monarch, are appointed to rule the country. Their conduct is subject to much scrutiny and intrigue, worse than in an Italian court. The country has invariably suffered under a regency, and the Chinese speak with horror of an aristocracy or the rule of a woman, which is

nearly the same thing as the rule of eunuchs.

The installation of an emperor is very solemn. Shunche was carried on a board by his Tatar subjects, and proclaimed emperor. But when Kang-he, being of age, ascended the throne, all the mandarins were ranged on both sides, dressed in silk, flowered with gold in the form of roses. There were fifty men who held great umbrellas of gold brocade and silk, with their staves gilt, divided into two rows. On the side of them were fifty other officers, having large fans of silk, embroidered with gold, and near these were twenty-eight large standards, embroidered with golden stars, and the figures of the moon in all its changes, etc. In order to represent its twenty-eight mansions in the heavens, and its different conjunctions and oppositions with the sun, as they appear in the intersection of the circles, which the astronomers call nodes, these things were delineated with considerable accuracy. A hundred standards followed these, and the rest of the mandarins carried maces, axes, hammers, and other instruments of war or court ceremony, with heads of strange monsters and other animals.—This is the description of an eye witness, and on reading it we very soon perceive that a mortal on this day is raised to the dignity of Heaven's son, and is, therefore, surrounded with so many celestial banners.—*Gutzlaff's China Opened.*

SHELLS.—No. I.

SHELLS have long excited interest. In many a humble dwelling they may be seen; while, in habitations of a higher order they often appear as the result of a choice directed by intelligence and taste. Many a specimen, too, is associated with the remembrance of a delightful search on the sands when the tide was out; of intercourse which gladdens and improves the heart; and of scenes which have left impressions on the mind not to be effaced.

What interesting materials for conversation might be found, were an acquaintance with their circumstances more general! Under this conviction, some papers on mollusca have already engaged the reader's attention; while they have also been calculated to render intercourse more profitable, not only by the impartation of valuable knowledge, but by di-

recting the thoughts and the feelings towards the great and glorious Author of all.

The shells of the mollusca are formed either of one piece, or of several; the separate pieces, in either case, being termed valves; so that shells may be univalve, when they consist of one, bivalve of two, and multivalve, of a greater number of pieces.

The univalves are the most simple. They have two principal parts: one of which is distended, called the body, and the other tapering, called the spire, as in the engraving. The latter is formed



by the parts which roll round, and are called whorls, from an old Saxon word meaning a round. As they successively roll round one another, they gradually increase in size; and hence the set of them is called the spire, from a Greek word signifying convolutions, gradually increasing in diameter, like a rope coiled up.

If the centre whorl is gradually raised above the rest, it resumes a conical form; when the whorls are all, or nearly on the same plane, the spire is said to be *retuse*, from the Latin word meaning beaten

back, because they seem to be so into the body; but if the whorls taper to a fine point, the spire is said to be *subulate*, from the Latin term for a pointed tool. The lines formed where the whorls meet, is called the suture, that is the seam or joining.

The point of the spire, or top, is called the apex, *D*, and the opposite or bottom part the base, *E*. The opening is the aperture or mouth. When the shell is placed on its base, with its mouth turned towards the spectator, the part nearest the right hand is called the right side, and that nearest the left hand the left side; the part facing him is called the front, and the reverse the back.

If a shell be so cut down the middle, that the inside may be seen, a pillar



will be observed round which the whorls appear to wind; this is the *columella*, from the Latin for a little column; the edge of the mouth nearest it is called the columellar lip, and the one outside the mouth the outer lip.

The species of mollusca which would suffer from the mouth being open, have this organ provided with a kind of lid, closing the entrance to the shell when the animal retires into it: it is called *operculum*, the Latin word for covering. The operculum provided for land animals, such as snails, is temporary, and after a certain period falls off; but that with which a marine shell is provided, is either a calcareous or horny substance, attached not to the shell, but to the foot of the animal, who draws it over his mouth when he pleases to recede into his dwelling.

Many shells have projections: some, like thorns, have ridges, and others

rounded protuberances. Those which have spines are said to be spinous; the ribs, which are longitudinal, rounded sutures formed at the various growths of the shell, are called *varices*, from the Latin for a swollen vein; and those having rounded projections, are called tuberculous.

From these facts, and others connected with them, the science is formed called Conchology, a name derived from the Greek word for a shell, and from another which means a discourse. An acquaintance with it may be rendered subservient to the improvement of the mind and heart. Happy is it when these ends are sought and gained. But in order to this, human knowledge must have a foundation in that which is divine. There must not only be the study of the works of God, but the operation of the Spirit of God. Ever should the Redeemer's declaration be regarded: "This is life eternal, that they might know thee, the only true God, and Jesus Christ whom thou hast sent," John xvii. 3.

EARLY KNOWLEDGE.

In popular usage there is some distinction between knowledge and wisdom. The one implies an acquaintance with facts, the other a right use of what is known. The man who is acquainted with facts in nature and providence, for instance, that certain things taken into our systems tend to kill us, and others to nourish us; that industry promotes thrift, and indolence poverty; that intemperance invites disease, and temperance repels it; that benevolence brings happiness, and selfishness misery; that sin aims to destroy us, and righteousness to bless us; that mankind are involved in iniquity, and that God has graciously provided redemption for us; that they who accept of proffered grace and return to obedience will be delivered from ruin, and that they who do not will perish—such a man is said to have knowledge on these subjects. If he makes a right use of his knowledge, that is, turns it to valuable account, he is said also to be wise.

The terms are, however, not unfrequently used interchangeably, as in the sacred Scriptures, to comprehend both ideas. They there express the character of the mind which aspires to rise intellectually and morally; which entreats the

acquaintance, service, and enjoyment of God, as he is presented in his works and word; in contrast to the mind which, acting in a manner unworthy of its high birth and privilege, sinks down under the dominion of sensuality, stupidity, and moral death.

The true preacher has said, "That the soul be without knowledge, it is not good." The human mind was made for knowledge; it is the appropriate possession and true glory of the intellect. It distinguishes man from the brutes. The pursuits and pleasures of sensuality and of instinct are theirs, as well as ours; but the nobler pursuits and pleasures of the mind are given only to man. To hold high converse with the works and government of God; in the language of the great preacher, "to know wisdom and instruction; to perceive the words of understanding; to receive the instruction of wisdom, justice, judgment, and equity; to give subtilty to the simple, to the young man knowledge and discretion;" these are the distinguishing prerogatives of that mind which was made in the Divine image.

Would you see the importance of knowledge on a wide and general scale? Look abroad over the world. Mark the stupendous difference between the nations elevated by knowledge, and those sunk in savage ignorance. Contrast the civilized nations of Europe and America, basking in the beams of mental illumination, with those which are shrouded in mental darkness.

Would you behold the importance of knowledge individually? Look, then, around you. Do you not see, in the case of every man who walks your streets, and acts a part in the passing scene, that "knowledge is power?" The power that wealth confers is frequently great; but the power of knowledge is far greater and more enduring. Do you not plainly perceive that it is the grand means by which men rise to honour, influence, and usefulness? And what boundless sources of exalted and enduring happiness does it open to the mind! The man who has no higher knowledge than just to exert his muscles in some accustomed way, to earn his subsistence, may be in a measure useful and happy. But how limited and grovelling must his happiness be, compared with his whose thoughts climb upward through nature to God; whose mind, while his hands toil, has learned to converse and sympathize with other and superior minds;

who studies the laws and operations of the material and moral world; who holds communion with the past, the present and the future, and who thus lives not only in the little spot and amidst the little interests about him, but as an heir of immortality and a denizen of the universe.

There is, among young men, a prodigious and most lamentable waste of intellect. How few do justice to their native powers! How few so improve their means and talents as to rise to that eminence which a kind Providence has placed within their reach! It is peculiarly desirable to acquire as much knowledge as possible, while young.

I. Because it is then acquired most easily. All the powers of mind are then active and elastic; the feelings are fresh and vigorous; imagination is lively; the spirit exults in buoyant hope, which prepares it for severe and successful effort. As you advance from youth, the sinews of the mind become more stiff and rigid; it is less inclined and less able to expand; so that if you pass on to mature years with your mind narrowed by ignorance, it will probably always revolve in the little circle of a beaten track.

II. Early knowledge is not only the most easily acquired, but the longest retained. The memory becomes treacherous as we advance. With most persons, it begins to fail by thirty-five or forty; and they then find by experience, that their early knowledge has the firmest hold of their intellects. One thorough reading of a history, while young, is worth more for the purpose of impressing its facts upon the mind, than half a dozen readings at the age of forty or fifty. Hence the lessons of the nursery, the spelling-book, the Sabbath school, and of those who subsequently instruct our youth, impart the knowledge which most faithfully attends us through all our life to second childhood and the grave.

III. Early knowledge is very valuable capital, with which to set forth in life. It gives one an advantageous start. If the possession of knowledge has a given value at fifty, it has a much greater value at twenty-five; for there is the use of it for twenty-five of the most important years of your life; and it is worth more than a hundred per cent. interest. Indeed, who can estimate the interest of knowledge? Its price is above rubies. How often do we hear men advanced in life say, "If I had only possessed the

knowledge when young, that I now have, I might now have been rich, learned, great, influential, or useful." The essential elements of knowledge, you may acquire while young. The laws of nature, the constitution and movements of the human mind, and the relations of cause and effect, are the same in all times and places. If favoured with opportunities, therefore, it is your own fault if you do not secure the needful knowledge, and have to go through life suffering for want of it.

IV. Early knowledge is important, to enable the individual to feel his own strength. Thousands mistake their calling, from want of early knowledge. Men who might have acted a brilliant part in various pursuits, are often doomed through life to a repelling and fruitless employment just because they did not possess sufficient knowledge while young, to direct their energies in the right course.

V. Most of all is early knowledge important, to dispose and enable you to escape the perils of temptation and sin; to invite your rising energies away from the solicitations of youthful lusts and passions; to lay before you the vast motives to rise to the proper dignity of your intellectual and moral being; that you may thus, through Divine grace, secure the great end for which you were made, which is to glorify God and enjoy him for ever. In a very important sense, young men are saved by knowledge and ruined for want of it. "My people are destroyed," said God, "for lack of knowledge; because thou hast rejected knowledge, I also will reject thee." Therefore, let every young man, to whom the acquisition of knowledge is yet possible, be admonished to seek it rather than choice gold, to prize it above rubies; assured that all the things to be desired, are not to be compared with it.—*Hubbard Winslow.*

FLOWERS.

ONE of the beauties which king Solomon particularizes in the earlier part of the year, along with the "singing of birds," is the appearance of "flowers on the earth;" and to the contemplative mind a finer subject for meditation cannot be chosen among the diversified productions of creative wisdom. In whatever point of view flowers are studied, whether in their forms, their distribution, their structure,

their colours, or their uses, the variety presented is indeed most wonderful.

If, for instance, the flowers of a particular season be contemplated, such as those of the spring, they will be found to have striking characteristics peculiar to themselves. They appear, in one point of view, to be more cheerful from their fine contrast with the dark footsteps which winter has imprinted on the garden, and which it takes the gardener much time and pains to efface from the surface with his spade and rake. The surface has been drenched and washed with rain, till it has more the appearance of a pond drained of its water, than of the well tilled soil of a garden. The walks are deformed with worm casts, the box-edgings are rugged and brown, the borders are without the profuse luxuriance of summer, and the general face of the flower garden looks bare, barren, and bleak.

In contrast with all this unsightliness, the redeeming beauties are the spring flowers peeping out in clusters from the warmer nooks, like the starry constellations in a dark sky. These characteristics remind us of the fine sunny days of the season, dispersed, or as a gardener might say, planted at distances amidst the gloomy and drizzling weather. If, again, like the patriarch of old, we go forth to meditate in the fields; if we go to the woods and the hedge banks, we shall find the spring flowers all grouped and clustered together, as if to invite, by acclamation, the visit of every sun-beam that can pierce through the clouds,—nestling in snug corners out of the way of cold winds, and requiring to be sought for, rather than welcoming attention.

It is thus that the snow-drop hangs its pearly bells beneath the shelter—leafless though it be—of the oak and the birch in our native woods, or basks on the declivity of a river bank in the beams of the southern sun. It is thus that the sweet violet extends its runners under the hawthorn in the hedge, or round the wild rose tree in the copse, and seemingly fearful of this not being sufficient to screen its beauties from common view, it spreads its own broad leaves over the blossoms, and breathes its fragrance on the air around. It is thus that the primrose clusters in groups by the side of the green holly, contrasting its pale, delicate blossoms with the thick wrinkled bunch of leaves beneath. And it is thus that the crimson carnygle, (*Orobis tuberosus*), the pretty grass rush, (*Lu-*

zula campestris,) and the blushing wind flower, (*Anemone nemorosa*,) beautify the spots where they congregate, and delight the eye that rests upon them.

In alpine or polar countries, where the snow melts with the increasing warmth of the sun, as the days continue to lengthen, whether it be earlier or later in the season, the plants which had lain protected from the sweep of the bleak frost winds by their covering of snow—cold though it be—soon start into vigorous growth, and come into flower in a space of time incredibly short. This is as much caused by the greater length of the day allowing the light to play upon them, as it is to the increase of warmth; for flowers will not blow at all if kept in the dark, and the greater and clearer the light is to which they are exposed, the quicker the flower buds will be in expanding. This has been proved by the ingenious experiments made by the botanists of Geneva, and now practically acted upon in the imperial garden of the Czar at St. Petersburg, of throwing as much artificial light as possible upon the plants, during the night, by means of lamps and reflectors.

The extraordinary effects of light indeed, on the expansion and beauty of flowers, is abundantly proved by the great care taken by florists in the management of it, in treating their choicer flowers. While the plants are not in a state of active growth, indeed, little attention is paid to what proportion of the sun's light may fall upon them; but no sooner do the flower-buds form and begin to swell, than more attention is paid to light than to any other circumstance. In their earliest expansion, the light is carefully admitted, even when the florist is not fully aware of its importance; but removes his glass under the notion of hardening his plants by admitting air, which is good, no doubt, in its place, though without sun-light it would be of no avail whatever in improving the health or the hardihood of flowers. The florist imitates the snow covering of their native alps, in covering up his auriculas during winter; but he takes care to sun their flower-buds as much as he can, to make them swell strongly, continuing the exposure to sun-light at all possible opportunities, till the flowers are about half expanded, when he completely changes his management, according to a principle which shall be presently stated.

As exposure to sun-light, as has just been shown, has a powerful tendency to forward the expansion of flowers; so, when a flower is once expanded, the continued influence of exposure to the sun has an equally powerful tendency to hasten its decay, by ripening the pollen in the anthers, and promoting the impregnation of the seed. The moment this impregnation is effected, the flower begins to fade; the petals become flaccid and droop, and their colours lose their original brightness and beauty. Now, by shading the half-expanded flower from the sun's rays, and keeping it in a sort of twilight, by means of canvass, of paper shades, or the like, the ripening of the pollen in the anthers is retarded, the impregnation of the seed does not take place, and the colours and freshness of the flowers are retained for an indefinite period of several days, sometimes of several weeks; according to circumstances, instead of yielding to the first bright day of the season.

From the fading of flowers, depending as it thus seems to do on the ripening, by the influence of the sun's light, the pollen in the anther, and the subsequent impregnation of the seed, it will follow, that by cutting out the anthers, when the flowers are of a convenient size and form to admit this, the period of their blooming might be thereby much prolonged. This effect, indeed, has been repeatedly proved by experiments, as in the case of crossing varieties of the same species, when the success, or the want of success in the trial, is tested by the petals continuing fresh, or becoming flaccid and fading.

There is also a very commonly known proof of the same principle, in the case of such double flowers as are infertile and unproductive of seed. In these; there being no anthers, the seed in the seed-organ cannot be impregnated by pollen; and consequently, all such double flowers, although they be exposed to direct sunshine, will continue much longer without fading than single flowers of the same species. Those who are but slightly acquainted with botany, are apt to consider the principle to hold too generally respecting the infertility of double flowers. It does by no means, however, hold true that all double flowers are incapable of producing seed; for upon many sorts the doubling of the petals does not at all affect their fertility. Among the infertile, unproductive sorts, are the double

stock, the double wall-flower, the double rocket, and the double nasturtium. Among the fertile and productive sorts, are the double rose, the double dahlia, the double china aster, the double annual chrysanthemum, the double marygold, and in short all the double flowers belonging to the Linnæan class of Syngænesia, and many of those belonging to the classes Icosandria and Polyandria, while those belonging to other classes, are apt to be altogether, or nearly infertile.

In the instance of the anthers being artificially removed to prolong the blooming of a flower, the experiment may be upset from a quarter perhaps little expected. Bees and other insects which visit flowers in search of honey, often, with their hairy bodies, brush off the ripe pollen from one flower, and carry it to another, crossing in this way the varieties of a species, and producing new varieties. In the same way a bee, or other insect, with its hairs dusted over with ripe pollen, on entering a flower whose anthers have been cut out, will at once cause the impregnation of the seed, and the petals will wither as speedily as though the anthers had never been cut out.

The crosses for varieties, either accidentally by insects, or purposely by experiment, is, in these modern days of floriculture, altogether endless. The florist sows in a garden box or pan, early in spring, a few pinches of the smooth, pretty, egg-formed seeds of the hearts-ease, (*Viola hybrida*) saved in the preceding autumn from his finest sorts; he waters it when dry, covers it up at night to shelter it from chance frosts, and has the satisfaction of seeing the tiny plants spring into life almost under his eye. When these young plants have got into their third or fourth leaf, in the succeeding May or June, he pricks them out, in a rich bed, or border, previously prepared with proper compost or manure. Within a month or six weeks, more or less, the blossoms appear—several fresh ones every day, if the plants be numerous; and what is strikingly remarkable, almost every individual different in colours, markings, or forms from any of his hearts-ease, which had bloomed the previous summer. The border consequently rarely appears two days the same, the ever-varying hues of the flowers, exciting fresh admiration, and new interest at every visit. Besides, when any very superior blossom appears

among the rest, another train of interest is excited to preserve and propagate the beauty by layers or strikings, and new grounds are furnished for admiring the wondrous works of creation.

These, and many other points of view, in which the meditative botanist may contemplate the flowers of the field or of the garden, are sufficient, perhaps, to repel the notion, that botany is a trifling pursuit, and unworthy of the attention of those who could, in the same space of time, turn their thoughts to more extended views, such as the expanse of the firmament, and the suns and worlds with which it has been peopled by Omnipotence.

It may be answered that minds, no doubt there are, attuned almost exclusively to the grand and the sublime, while they pay little regard to what is small and beautiful; but such minds are by no means of common mould. Newton, indeed, and Galileo, "the starry Galileo," while their lofty spirits were careering in the fields of space, "and sweeping the long tract of day," might not deem it worthy of their high aspirations to contemplate a tiny flower; but the equally sublime Milton could celebrate in immortal verse,

"Gardens trim with daisies pied,
Shallow brooks and rivers wide."

L'ALLEGRO.

The attention of the great poet to flowers is also manifested in many parts of *Paradise Lost*, and it is not improbable that it was his personal feeling for individual plants, which he embodies in the eloquent burst of grief in *Eve* upon being forced to quit the garden of Eden,

—————"O flowers, That never will in other climates grow,—
My early visitation, and my last
At even! which I bred up with tender hand
From the first opening bud, and gave ye names!
Who now shall rear you to the sun, or rank
Your tribes, or water from the ambrosial fount!"

J. R.

THE MUSICAL BOX.

THE Caffers, says Steedman, were much delighted at hearing a musical box which I concealed in my pocket, crowding around me, and expressing the greatest surprize. They appeared quite at a loss to conjecture in what manner such music could be performed in my pocket, without any visible exertion on my part; nor did their astonishment cease when I exhibited the box, many of them starting back, as if expecting to see something extraordinary jump out of it.



Death of Cardinal Wolsey.

HENRY VIII.

THE year 1527, may be considered as commencing the second period of the reign of Henry VIII. It found that monarch altered for the worse in many respects since his accession to the throne. His arbitrary temper was strengthened by the flattery and obsequiousness of those about him; while the round of pleasures in which Wolsey encouraged Henry, rendered him more selfish and eager for licentious gratifications. His turn for literary pursuits was abated by the habits of a courtly life; his domestic felicity was lessened by the advancing age and infirmities of his queen. Henry VIII. was now turned of thirty-five, and had reigned eighteen years. He had seen enough of Wolsey to be convinced of the ambition and duplicity of the minister who engrossed the power of government, openly using the expression, *Ego et rex meus*, (I and my king,) in various public documents. The succession to the throne also caused considerable anxiety; his sons had died in infancy, leaving the father under the curse pronounced in the book of Deuteronomy, against the man that should marry a brother's widow, while the state of the queen's health was such that he could not expect other children to supply their

places. Among all the causes which concurred to render Henry discontented with his present situation, and desirous of procuring that change which could only be effected by a separation from Catherine, the most active and efficient was probably his own self-will, strengthened by the indulgence of so many years. But in addition to this, attachment to casuistical divinity rendered his mind very susceptible of scruples as to the lawfulness of the union. No one who has looked into the mazes of those writings, can wonder that Henry was led onward in a course of proceedings very different in their results from what he first contemplated. These scruples seem to have been both excited and strengthened by doubts respecting the lawfulness of the marriage, thrown out by the bishop of Tarbes, who was appointed by the French court to treat respecting a union between the duke of Orleans and Henry's only daughter, the princess Mary. The doubts were founded on the view, that the pope had not authority to dispense with any direct command of Scripture. The usual course then adopted in all cases of difficulty was to consult Aquinas and the school divines.

There appears full reason to believe that Wolsey originated the idea of a

separation from Catherine. He saw that the queen was losing the affection of Henry, and acted upon the king's feelings of superstition, using the instrumentality of the king's confessor, bishop Longland. Wolsey had at this period been deceived by the emperor, and now desired to promote the interests of the French king; this could not be done better than by removing the emperor's aunt from her station as queen, which enabled her to exert some influence in favour of her nephew. If that could be done, the cardinal's desire for revenge, and the political interests influencing him at that period, would be promoted, while his interest would be strengthened by the favour of a new queen mainly indebted to him for her elevation. If Henry could be induced to desire this course, there was no reason to doubt the pope's readiness to sanction the divorce, when plausible grounds were assigned; and the whole affair might have been easily effected, had not other circumstances arisen. Catherine herself openly charged Wolsey with being the originator of the separation; the emperor, and a historian who was intimate with the pope, did the same. De Bellay, the French ambassador, wrote to his court that Wolsey avowed to him that he had suggested the subject, to break the union with the emperor. The precise date of these occurrences is not known; probably they belong to the year 1526, at which time the cardinal instructed the English ambassador to pay particular attention to the duchess of Alençon. Early in 1527, the bishop of Tarbes openly stated the above-mentioned difficulty. One subject of Wolsey's negotiations when in France, in July 1527, appears to have been a marriage with Renée, another French princess; the sister of Francis having refused a union, which, however gratifying to her, must have inflicted wretchedness on Catherine. While on this embassy, Wolsey wrote to the king respecting the divorce as "his great and secret affair," which would give him "deliverance out of a thrall'd, pensive, and dolorous life," and referred to it as desirable for "his health, and for the surety of his realm and succession." It also appears from a letter Wolsey wrote when setting out, that he knew queen Catherine was aware of his plans, and would not willingly consent to them. At this time, rumours of the separation were so public, that the lord mayor was

commanded to stop them, the avowal being then premature. But the subject occupied Henry so fully, that it could not be set aside without complete examination.

Wolsey returned from France in October, 1527, having taken measures to obtain the papal consent to a divorce; though with his usual duplicity, he forbade the ambassadors to the emperor to mention it, but the report had already reached Charles, and of course it was resented by him. The king had till now intended that the decision of the question should rest upon the sufficiency of the bull of dispensation of Julius II., allowing his marriage, saying to Wolsey's agent, the bishop of Bath: "If it be nought, let it be so declared; and if it be good, it shall never be broken by no ways for me."

On his return to England, Wolsey discovered that the king's affections were placed upon Anne Boleyn, the daughter of Sir Thomas Boleyn, a gentleman of estate in Norfolk. She had, when a mere child of seven years old, accompanied the king's sister on her marriage to Louis XII., in 1514, and remained in France after the return of that princess to England. There she was carefully instructed in the accomplishments of that age, being much favoured by the new queen, and the duchess of Alençon. After the marriage of the latter to the king of Navarre, she returned to England, in February, 1527. There her father, who had been employed in several embassies on the continent, and was now a regular attendant at court, obtained for her the appointment of a maid of honour. Beautiful in person, lively and attractive in her manners, Anne Boleyn soon engaged attention. The king sought her favour on dishonourable terms, which she steadily refused. There is no ground for the vulgar calumnies and vile obloquy which the papists endeavour to heap upon her memory, while a principal cause for their hatred appears in her early inclination to the principles of the Reformers, which she imbibed in the family of Margaret, the queen of Navarre, who was much attached to the study of the Holy Scriptures.

Here, then, was another and a still more powerful inducement for Henry to desire a separation from Catherine; but his wish for a union with Anne Boleyn was not the cause of the plan for a divorce being proposed, though many writers have

so asserted. There is no reason to suppose that the king manifested attachment to her before the cardinal's absence; and though Wolsey had previously desired her father to withdraw her from court by the king's command, he assigned a sufficient reason, the favour with which she was regarded by the son and heir of the earl of Northumberland, a match supposed to be above her pretensions.

Wolsey now found himself entangled in his own devices. His desire for revenge against queen Catherine and the emperor might still be gratified, but his other plans would be impeded by the king's marriage with one whose connexions were inclined to support the feelings then rising against popery, and whose influence was more likely to oppose than to promote his own. He knelt before the king, vainly trying to dissuade him from thinking of a union with one of his subjects; but found it useless to oppose the arbitrary will he had himself contributed to strengthen. He hesitated, dissembled, and even directed his agent at Rome not to urge the pontiff to favour the divorce. At that time, Clement showed a disposition to forward the measure, but finding the cardinal not anxious for it, he hesitated; and afterwards, from a dread of the emperor, to whose army Rome was exposed, and to whom he was himself a prisoner, he dared not countenance a measure at once displeasing to Charles, and distasteful to every bigoted papist. How complicated are human events, and how continually do the children of men counteract their own darling schemes!

"Blindly the wicked work
The righteous will of Heaven."—SOUTHEY.

Early in the year 1528, Wolsey found that he no longer possessed undivided influence over Henry. Anne Boleyn had more power than himself, and his own ruin would probably ensue from any opposition to her. He therefore again changed his course, and endeavoured to induce the pope to countenance the divorce, by declaring that the circumstances of the case, if proved, would render the marriage invalid. Authority was delegated to Wolsey, to inquire into these circumstances. But Charles had interfered to bind the pope against granting a divorce, so that Wolsey, with increasing apprehension saw the king's mind fixed upon Anne Boleyn. With much difficulty he ob-

tained from the pope a verbal consent to the divorce; but the pontiff refused to give the written engagements Wolsey desired; and when at length he affixed his signature, it was on the express condition, that no attempt should be made to act upon the document, while he was in the emperor's power. The details given by Gardiner and Fox, the agents for Wolsey and the king, are minute; they show the pope in a very humiliating light. Desirous to avoid displeasing either Henry or Charles, his great aim was to gain time and defer his decision, hoping that some change of affairs might extricate him from his difficulties; but the result was unsatisfactory, and England was lost to the papal see. The descriptions the ambassadors gave of their reception at the papal court are almost ludicrous. Gardiner chided the pope till he drew from him tears of vexation or regret: on another occasion, when strongly urged, "the pope said nothing, but sighed and wiped his eyes." He cared not for the matter in a religious or moral view, but he dreaded being again a close prisoner to the emperor.

It was apparent, that Anne Boleyn was willing to become the queen of Henry, if the divorce could be obtained. This was an act of treachery to Catherine, which would have been rejected by a right-minded woman; but the crown had charms for Anne; deeply did she afterwards lament her departure from the high principle by which she ought to have been actuated. But there is not the least ground to suppose that she appeared at court with any design upon the king; she favoured the suit of Percy, and had no ground to suppose that it was in her power to induce the king to make her his wife. When convinced that this was a possible event, we cannot be surprised that a young female of twenty, educated in courts, should not refuse to become a queen, if it could be arranged in a lawful manner.

Of the assertions made by Romish historians respecting Anne Boleyn's family as well as herself, it is sufficient to say that they are utterly unfounded. Not one real authority can be adduced in their support, while those who examine them will find that they are so contradictory as to refute themselves. She absented herself from court, and the earliest date of her written correspondence with Henry bears the date of April, 1528, at which time the pope's

sanction to the divorce was expected. The preservation of these letters is very singular. They are in the Vatican library at Rome, having, it is conjectured, been pilfered and conveyed there by Campeggio, probably in the hope that they might afford materials against Henry and Anne; but they completely disprove the coarse falsehoods of Saunders, and other papal advocates. They exhibit Anne Boleyn willing to take the rank of queen, but they certainly do not imply any unlawful intercourse between them. They justify Turner's statement, that "these letters are written in very decorous, affectionate, and earnest terms, and with the feelings and phrase that men use to honourable and modest women." Not perhaps in the refined phraseology of modern times; in some passages the expressions sound coarse to modern ears, but certainly the letters are written in good faith, and without artifice.

At this time, the sweating sickness raged again. This singular disease frequently proved fatal in three or four hours. The French ambassador then in England thus describes it: "We have a little pain in the head and heart, we suddenly begin to sweat, and need no physician; for whoever uncover themselves the least in the world, or cover themselves too much, are dead in four hours, and sometimes in two or three." But although so quickly fatal, it was rather an alarming than a mortal epidemic; the far larger proportion recovered. At one time, the same writer stated, "of forty thousand affected, only two thousand have died." Persons of the highest rank were exposed to this alarming malady: the lord treasurer was attacked by it; some of the royal household died. Henry moved from place to place when the infection appeared. He described himself at this period as living alone and shut up, having made his will and taken the sacrament, which he regarded, as unhappily many now do, as a sort of pledge or assurance of heavenly happiness.

By the desire of Wolsey, cardinal Campeggio was joined with him as commissioner to inquire respecting the divorce. The pope had given a hint that it would be better for Henry to proceed in his legantine court before Wolsey alone: the prelates of England also objected to a Romish commissioner; but Wolsey thought he should thereby be better enabled to shelter himself, and hinder the union with Anne Boleyn.

He now felt that he was involved in mazes from which he could hardly escape; and at times he expressed a desire to withdraw from the world to dedicate himself to religious duties, though it was evident that he never would adopt that course, while he could retain rank and power. The advice given by the pope was characteristic of Romish craft. He recommended the king to marry another wife, if he felt satisfied in his own conscience, and to leave the pope to decide whether it was right. This step would have left Henry wholly subject to the papal will; he saw the snare, and avoided it, by pressing for an immediate determination of the question.

Campeggio was appointed in April, 1528, but delayed his journey on various pretexts, so as not to arrive in England till October. He brought with him the pope's bull dissolving the marriage, but was authorized not to allow it to go out of his own possession, and if possible, to persuade Catherine to remove the difficulty by retiring to a nunnery. He was to delay matters as long as possible; when he could procrastinate no longer, he was to refer the sentence to the pope. Wolsey's objects were more complicated; to disappoint Anne Boleyn, to punish Catherine, to be revenged on the emperor, and to show and maintain his own power and influence. This was too difficult a course to be successful, and the rather, because Wolsey had committed the nation to a very unpopular, though a short war with the emperor. Wolsey tried to cast blame on the herald employed to threaten hostilities, but it was brought home to himself. The king was displeased, and forced to take measures to remove the popular discontent.

The attempt to induce Catherine to consent to a divorce was unsuccessful. In a private conference, she boldly reproached Wolsey for his vices, and charged him with originating the proceedings against her. To Campeggio she declared, that she could not agree to any course which would compromise her daughter Mary's claims to the throne.

The cardinals held their court at Bridewell, then a palace, where they sat as judges, in May, 1529. Catherine, after protesting against the whole proceeding, personally appealed to the king, refused to answer, and departed. The king presented the evidence in support of his application, but the point really for consideration was, whether it

were safe to proceed. Wolsey was willing, but Campeggio refusing to go forward, the affair was protracted. Some of the courtiers gave Henry proofs of Wolsey's double-dealing. Meanwhile the state of affairs in Italy enabled the emperor to control the pope: Francis also made peace with Charles; so that Henry's desires were not likely to be fulfilled. In July, Campeggio adjourned the legantine court till October, and in the interval announced that the pope had removed all further proceedings to his own tribunal at Rome, leaving Henry justly displeased at the duplicity of the whole proceeding.

The downfall of Wolsey was at hand. On accompanying Campeggio to take leave of the king, then at Grafton in Northamptonshire, to his great astonishment he was told that no apartment had been provided for him. Sir Henry Norris offered him the use of his own chamber. When in conversation with the king, the latter was seen to show Wolsey a letter which he charged him with having written. The next day the cardinal departed to London, out of favour with the king, and betraying childish weakness under the apprehended loss of his dignities. Anne Boleyn evidently used her influence to prevent the king from listening to his excuses. The courtiers forsook him; on October 17th, Wolsey was required to give up the great seal, and confine himself to his palace at Esher. Knowing that the invariable result of the loss of power was the privation of property, he prepared to surrender his most valuable effects before they were forcibly taken. Cavendish says, "Then went my lord cardinal, and called his officers before him, and took account of them, for all such stuff and things whereof they had charge. And in his gallery were set divers tables whereupon lay a great number of goodly rich stuffs; as whole pieces of silk of all colours, velvet, satin, damask, tufted taffeta, grogram, sarcenet, and other things. Also there lay on these tables, a thousand pieces of fine holland. And there were books made in manner of inventories, wherein he took great pains to set all in order against the king's coming. Then had he two chambers adjoining to the gallery, the one called most commonly the gilt chamber, and the other the council chamber. In the gilt chamber were set out nothing but gilt plate; and in the council chamber was all white and parcel

gilt plate, and books set by them purporting every kind of plate."

Cavendish records another circumstance, which had considerable influence on subsequent events. This was Thomas Cromwell's leaving the service of the cardinal, to place himself in the royal employ; he was seen in tears, and declared his intention to go immediately to the court, "either to make or mar ere he came again." Pole stated that Cromwell suggested to Henry to throw off the papal yoke, to which he probably added the prospect of obtaining pecuniary spoils from the monastic establishments. These ideas must have been familiar to any trusted servant of Wolsey; both had been urged by the cardinal, when instigating the French ambassador to question the pope's power to dispense with the Divine law. Campeggio then reproved Wolsey, and spoke of the papal authority as "infinite." Wolsey, as we have seen, had also himself commenced the spoliation of the monasteries. Thus this haughty and hypocritical statesman fell by his own devices; it is even probable, that he was aware of the suggestions of his late retainer.

Cromwell showed fidelity to his former master, by successfully opposing an act of impeachment brought forward by Wolsey's enemies against him, for exercising a legantine authority derived from the pope, interfering with the royal prerogative: for this he had the king's license; but the sun was hastening to its setting.

We may here briefly narrate the close of Wolsey's life. He was compelled to give up his principal palace, York House, afterwards White hall, and to sue humbly for pardon. In the spring of 1530, he was permitted to return to York, where, after bitterly lamenting his losses, he endeavoured to win the popular favour by apparent humility, and strict attention to his episcopal duties. But symptoms of returning ambition soon appeared. He was detected in correspondence with foreign powers, when his arrest for high treason was ordered. Being removed from York, he complained of sudden illness, but was conducted to Leicester. On entering the abbey in that town, he said he was come to lay his bones there. Death rapidly approached. Wolsey's last hours have been minutely described; they present an instructive lesson. Gradually sinking under an attack of

fever and dysentery, he left a memorable testimony to the vanity of worldly ambition, and of seeking human favour. He said to his attendants, "If I had served God as diligently as I have done the king, he would not have given me over in my grey hairs. But this is the just reward that I must receive for my diligent pains and study, that I have had to do him service; not regarding my service to God, but only to satisfy his pleasure."

Wolsey died November 29th, 1530, seeking support in his last hours from the superstitious observances of the church of Rome. The king received the intelligence of his death in a manner which showed he had no real regard for one who had, as it were, sold himself to gratify his will; only to be viewed as an instrument of pleasure or policy. Such however is the way in which men of the world estimate and treat those who aid their earthly projects.

The rapid fall of the cardinal was probably hastened by the king's mind being considerably enlightened as to the errors of popery. The extent to which the kingdom was plundered by the begging friars, had for some years excited considerable attention. It was ably exposed in a popular tract, called, "The Supplication of the Beggars," which was widely circulated, being scattered about the streets. One of the royal attendants brought a copy to the king, who listened attentively to the contents. He intimated his design to follow up the subject, quaintly remarking, that if an old stone wall was to be taken down, whoever began at the foundation would bring the upper part upon his own head! Wolsey cautioned the king against these books, when Henry took a copy out of his bosom, and gave it to the cardinal to study. There was another and more valuable class of books, the tracts of the Reformers, which at once exposed the errors of popery and plainly taught the way of salvation. Anne Boleyn brought some of these to the court, and gave them to her attendants; they also reached the king, and were read by him. The clergy were much alarmed: they urged the monarch to issue a proclamation against heretical works; but it was evident that his conscience was awakened, and that he would not allow the clergy to rule him as Wolsey had done.

The most interesting subject connected with English History at this period, is the gradual progress of the doctrines of

truth among the mass of the people. This is fully proved by the registers of the popish bishops, which record particulars respecting many individuals whom they persecuted. From these documents it appears that the followers of Wickliff were become very numerous, particularly in Herts, Buckinghamshire, Suffolk, and Essex. The progress of the Reformation in Germany and the Low Countries, also, had considerable effect upon London, where Lutheran books were brought over by persons engaged in trade. Tindal and others took refuge abroad, but continued to correspond with their friends in England. Tindal had been instructed in the universities, before he took the office of tutor in a family of Gloucestershire. Becoming aware of the errors of popery, he frequently engaged in controversy with the popish priests. One of these told him it was better to be without God's laws than the pope's, to which blasphemy Tindal replied, that he would try that even the plough-boys should in a few years be better skilled in the Scriptures, than the priesthood of that day. He then applied himself to translate the New Testament into English, and got an edition printed in Holland in 1526, whither he had retired after a short stay in London. Tonstal, bishop of London, thought to stop the further progress of this work by employing some merchants to purchase all the unsold copies, and caused the books to be publicly burned. But now was seen the power of the press. The money thus obtained supplied Tindal with the means of printing larger and more correct editions; the books were sent over in considerable numbers, but secretly, and found a ready sale among the people. The bishops were alarmed; they persecuted all whom they could detect as engaged in this trade, laying ruinous fines upon some merchants of note; but they could not succeed in checking the progress of the truth.

We must now return to the events which speedily followed the death of Wolsey. He had so long exercised absolute control as prime minister and ruling favourite, that his removal seemed to free both the court and the kingdom from a heavy bondage. The duke of Norfolk became chief in authority; his principal supporters were the duke of Suffolk, who had married the king's sister, and the earl of Wiltshire, the father of Anne Boleyn. Sir Thomas

More was appointed chancellor. The latter had been a decided opponent of Wolsey. His chief anxiety was to discharge the duties of his office faithfully, without any desire to promote his private interests at the public expense, living frugally and in the bosom of his family, enjoying the affections of his children. He was decidedly opposed to the reformation of religion, though he greatly encouraged learning. Though willing to repress the corruptions of popery, which he opposed by his writings, before Luther appeared, More was a bigoted adherent to the doctrines and will-worship of popery, a bitter persecutor of the Lollards, and of others who followed the truth as it is in Jesus. Natural facetiousness led him sometimes to jest upon the sufferers in an unfeeling manner; but upon the whole, England never had a better judge; he was in public and private life a direct contrast to the proud cardinal his predecessor. Gardiner had also a place in the ministry. His talents for crafty intrigue gave him more influence than has been generally supposed; He was associated with Anne Boleyn's father to be envoys to the pope and emperor for forwarding the divorce. But the pope was so thoroughly under the control of Charles, that he dared not consent, though he thereby lost his power over England. The papacy was now completely subservient to the imperial power, though it still preserved the name and semblance of authority.

When the pope refused his sanction to the divorce, Henry and his ministers were at a loss how to proceed. At this juncture, while the court was on a progress, Gardiner and secretary Fox lodged for the night at the house of a gentleman, named Cressey, at Waltham. After supper, the question of the validity of the king's marriage was talked of, when Dr. Cranmer, a clergyman absent from Cambridge on account of the plague, who was then residing in the family as a tutor, expressed surprise that there should be so much difficulty on the subject. Being asked what course he would recommend, since the pope was evidently determined against the divorce, he proposed that the best divines of Europe should examine the subject, to determine it according to the word of God. This might be ascertained by consulting the principal universities of Europe. When furnished with their opi-

nions, the king could proceed without reference to the pope.

Henry approved of the idea when reported to him. Gardiner would have passed it off as his own suggestion, but Fox was too honest to support this knavery. Cranmer was sent for: he had passed his youth in the usual sports and routine of a country gentleman's life, but becoming fond of study, applied ardently to it, and became a learned divine. He imbibed the principles of Luther, so far as to be drawn off from regarding the arrogant assumptions of popery; but being of a studious and quiet disposition, he was not openly known as inclined to protestantism, though, being public examiner, he exerted himself in requiring the study of the Scriptures. Thus on the present occasion he was prepared to urge the authority of the Scriptures over the interested mandates of the pope. This question went farther, it went at once to the all-important point, "How shall man be just with God?" Could it be only through the atonement of a crucified Saviour, the Son of God? or could it be attained by the interference of a mere mortal? was it a privilege which one man could sell and another purchase for money? The contest between Henry and the pope involved these important questions.

By desire of Henry, the earl of Wiltshire made Cranmer his domestic chaplain. In that retreat, he studied the question of the marriage, and wrote a book to prove that the pope had no authority to dispense with Scripture. We may be surprised that this proposition should require to be set forth with learned arguments, or that Cranmer and his associates should confirm their assertions against popery by reference to the Fathers, or other human authorities of the christian church, instead of simply declaring in the language of our Lord, "It is written;" but this shows the mental bondage then prevalent. The king now sent Cranmer abroad, accompanied by others, to obtain the opinions of the universities: they visited most of the learned establishments of Europe, and obtained opinions in favour of the separation. In some cases, money was required and given, the learned doctors being unwilling to hazard the emperor's displeasure unless recompensed for so doing. Every where, however, the

authority of Scripture was acknowledged as superior to that of the pope; indeed this question needed not to be asked, but by a people, like Israel of old, blinded and misled by those professing to be their spiritual guides. "To the law and to the testimony," says the prophet; "if they speak not according to this word, it is because there is no light in them," Isaiah viii. 20.

Most remarkable, indeed, was the providential dealing by which the pope was constrained by the emperor to adhere to the decree of his predecessor, else he would readily have sanctioned Henry's proceeding, and thus have prevented his authority from being questioned. Meanwhile the English parliament addressed the pope, requesting his sanction to the divorce: this was again refused; but Clement did not hesitate to intimate to the English agent at Rome, that he might possibly allow Henry to have two wives! Of course this proposal was not listened to; but the letter mentioning this suggestion has repeatedly been printed.

The emperor urged the pope to active measures against Henry, who was summoned to appear and answer for himself in the consistory court at Rome, and forbidden to proceed to a second marriage. No one dared to bring this summons to England, but it was affixed on the church doors in the ports of Flanders.

The measures against Henry, into which the pope was urged, were met by others against the papal authority. The suggestions of Cromwell were adopted. Under an old statute, the clergy as a body were fined for submitting to the legantine authority of Wolsey; they were obliged to pay 100,000*l.*, and to recognize the king as protector and supreme head of the church, adding, however, "as far as the law of Christ allowed." The bishops sought to throw most of the pecuniary burden upon the inferior clergy, but six hundred priests forced their way into the chapter-house of St. Paul's, pleading that the bishops and abbots had offended, and ought to pay the fine, while their scanty incomes of twenty nobles a year (a noble was 6*s.* 8*d.*) would scarcely provide them with the necessary articles of life. The prelates were forced to give way, but fifteen priests were sent to prison for riotous conduct.

The House of Commons was roused to press forward the liberation of Eng-

land from the yoke of Rome. An act was passed forbidding the bishops to pay the usual sums to Rome for sanctioning their appointments. After some other proceedings, the opinions of a number of theologians upon the king's marriage were laid before parliament, with a request that the members would make these opinions known among their constituents. Though a large number of the people desired the divorce, on account of the political advantages it promised, yet it was not altogether a popular measure. The women of England were naturally opposed to the proceedings against Catherine, which shook the security of the married state. The queen was urged to withdraw her appeal to the pope, and commit her cause to four prelates and four lay peers. She steadily refused, and then the king wholly withdrew from her society. The opposition to his will rendered his character more arbitrary: he was still further excited by an earnest admonition from the pope, ordering him, as he regarded the papal favour and his own salvation, to recall Catherine and dismiss Anne Boleyn from the court.

The contest deepened: we cannot go fully into all the details. More, seeing the papal authority in danger, resigned his office of chancellor, at which time his property in money did not amount to a hundred pounds. Warham, archbishop of Canterbury, died about the same time, in August, 1532, when the king resolved to appoint Cranmer to the vacant see. He was then abroad visiting the universities; his desire for quiet made him unwilling to accept the proffered honour. He delayed his return till November, hoping that the king would fix upon some one else to be primate. But Henry was strengthened in his determination, by a sentence of excommunication from the pope, who also denounced as invalid the union he was about to form with Anne Boleyn. This sentence was pronounced November 15, 1532, though its publication was delayed.

The close alliance between the pope and the emperor led to increased amity between Henry and Francis. They met at Boulogne, when Anne Boleyn was introduced to the French king as the marchioness of Pembroke.

Cranmer had no desire for the responsible office of the primacy, but he consented to receive it from the king, not from the pope. Henry was not fully prepared to throw off the papal yoke: he therefore

desired and obtained the pope's sanction in the usual form. The new archbishop, however, protested against any recognition of such authority, except so far as it might agree with the word of God, repeating publicly this declaration three times, when he was consecrated in March 1533. This was very different from the secret protestations common in those days, yet to us it bears an appearance of the casuistry in which Cranmer had been educated, and from which he was not yet emancipated. Warham, his immediate predecessor, had, by a private protest, thought to relieve himself from the obligation of obedience to the pope, a few years before.

Two months before the consecration of Cranmer, the king married Anne Boleyn. The ceremony appears to have been performed early in the morning of January 25th, 1533, in an upper room of the palace at Whitehall. Dr. Lee, one of the royal chaplains, read the service. Only three attendants were present. The event remained secret for some time; Cranmer himself did not know of it till a fortnight afterwards. On April 12th, the new queen was publicly announced; shortly after, the archbishop held a convocation, to determine the question relative to the king's marriage with Catherine, who was cited to appear, but refused. The union was then declared to have been illegal and invalid. This was followed by a magnificent coronation of the new queen, who was conducted to the Tower by water from Greenwich; and two days afterwards proceeded in state to Whitehall. She was crowned at Westminster, on June 1, when for three successive days splendid pageants were exhibited.

The pope was thus set openly at defiance, which he resented by declaring that Henry was excommunicated, unless he separated from his new queen before the month of September. Henry was equally decided: he sent Bonner, whose vindictive and determined temper was now directed against the pope, to read an appeal from the papal decision to a general council. Bonner executed his orders, but hastened away, being threatened that he should be thrown into a caldron of molten lead. The pope, at the suggestion of the emperor, held a consistorial court, when nineteen out of twenty-two cardinals declared against Henry. Clement then pronounced a decree, annulling all the proceedings

against Catherine; but he withheld the publication of it, still hoping to conciliate the king of England. Meanwhile queen Anne gave birth to a daughter in September 1533, who was named Elizabeth, and who fully realized the apprehensions of the papists, relative to the consequences of the king's marriage with her mother. The parliament met in November, when the kingdom was declared to be wholly independent of the pope; all payments to the see of Rome were forbidden. The princess Mary was deprived of her right to the throne: Catherine was styled dowager of prince Arthur; but she firmly refused to relinquish the title of queen. Cromwell was the agent chiefly employed in these measures, which were popular with the best informed part of the community, whose feelings are thus described by the contemporary chronicler Hall: "In this year, the third day of November, the king's highness held his high court of parliament; in the which was concluded and made many sundry good, wholesome, and godly statutes; but among all, one special statute, which authorized the king's highness to be supreme head of the church of England, by the which the pope, with all his college of cardinals, with all their pardons and indulgences, was utterly abolished out of this realm. God be everlastingly praised therefore." To this every wellwisher to his country will add, Amen. Among other proceedings, this parliament petitioned the king against the cruel and inquisitorial proceedings of the Romish prelates in persecuting men under the charge of heresy, which still continued. It is in vain for modern Romish historians to impute these to the secular power; the registers of the prelates themselves prove where they originated.

The papists had no right to object to these proceedings of Henry respecting the divorce, which the pope had in fact secretly advised, while he was openly obliged to oppose it. The time-serving, contradictory conduct of Clement, was by no means suitable for one who arrogated to be infallible; but the conquests of Bourbon rendered him subject to the emperor; thus the enthrallment of the pope led to the liberation and subsequent prosperity of England. Henry was learned beyond the monarchs of his age; but his mental acquisitions rather strengthened than diminished his attachment to popery; and, but for his personal collision with the pope, his mind would

not have sought deliverance from the thralldom of Rome, nor would his affection for Anne Boleyn have promoted the English reformation.

It is remarkable, that the breach between Rome and England appears to have been made irreparable by the precipitate conduct of Clement, rather than by the measures of Henry. By the efforts of the bishop of Paris, who visited England, and from thence proceeded to Rome, under all the disadvantages of a winter journey, the pope was induced to promise Henry satisfaction, if he would go through the form of submitting the whole affair to the pope. A day was fixed for the return of the king's answer, and Henry sent a messenger to Rome with his engagement to consent. A winter journey to Rome was then a more difficult matter than it now is. The courier did not arrive as expected, by March 23, 1537. The French prelate pressed hard for a few days' delay, but the cardinals of the imperial faction urged an immediate decision, and Clement gave way to their importunity; the consistory then gave the definitive censure against Henry, pressing the affair to a conclusion more hastily than usual. Two days later the courier arrived; but the pope, though he earnestly desired to get rid of this hasty decision, was unable to do so. The wrath of Henry was increased when he heard what had passed: from that time he pressed forward open measures for separation from Rome. On what a thread does the fate of empires depend, as to human plans! But there is One who disposes all aright:

With Him is strength and wisdom:
The deceived and the deceiver are his;
He leadeth counsellors away spoiled,
And maketh the judges fools.
He removeth away the speech of the trusty,
And taketh away the understanding of the aged."

One important event hastens others forward. A large portion of the national clergy were inclined to favour the king's views; but the monks and friars have ever shown themselves the pope's devoted servants. The members of the monastic orders, which were formed to support the papacy, all opposed the king. As their influence upon the ignorant part of the people was very great, they excited much discontent, chiefly by false or exaggerated statements. There can be no hesitation in characterizing as treasonable, these attempts to put the

body of the people under the command of a foreign power, actually at war with their monarch. Let the reader attend to this state of affairs, by which a civil war was in effect again begun in England, which raged from house to house, though not supported by regular armies in the field. We need not be surprised at the vindictive passions which were roused in the breast of Henry, or the harsh and unfeeling measures he resorted to. Let it not be forgotten that these feelings were first excited by cardinal Wolsey, and afterwards brought into action by the popes Clement VII. and Paul III.

Hitherto, the persecutions for religion had been carried on rather by the king's advisers, than by himself. Occupied by his favourite pursuits and pleasures, Henry took no personal part in these sanguinary proceedings. The details are related in the ecclesiastical histories of that period. Warham, Wolsey, and More, all were more or less implicated in them. The cardinal perhaps left the details of these matters to Longland, Stokesly, and others; but by severe edicts against the writings of Luther, and determined opposition to the circulation of the Scriptures in English, he did all that the most bigoted papists could desire. More denied having actually forwarded these persecutions; but the piles in which Bilney, Bayfield, Tewkesbury, Bainham, and others were burned are witnesses against him, while the tree in his garden at Chelsea, to which even some respectable persons were tied and whipped, the commencement of the sufferings of Frith, and many other circumstances, show his persecuting spirit. It is painful and humiliating to find that Cranmer consented to the latter deed: though he endeavoured to save Frith, it was only upon condition of his recanting the views he had learned from Scripture, against the dogmas of transubstantiation. Such was the feeling excited against these sufferers, that Dr. Cooke, rector of a London parish, openly told the people standing around the stake at which Frith and a lad named Hewitt were burned, not to pray for them any more than for dogs; the precise expression, as Turner observes, that Turkish bigotry has applied to all Christians. The same valuable historian plainly shows that Henry had not hitherto appeared severe and merciless, compared with other ruling

powers. His conduct does not suffer from a comparison with either Francis or Charles, except with reference to his queens, and his proceedings towards them certainly cannot be ascribed to the Reformation.

We have spoken of the resistance of the papists as being in fact civil discord, although embattled armies did not take the field with displayed banners, as in the wars of the roses. The leading combatants were a different order of men; they had recourse to the weapons of warfare they were most accustomed to use. Fraud and imposture have ever been the customary resorts of the monastic orders. Early in 1534, the matter of Elizabeth Barton, a young woman of Aldington in Kent, brought many papists into difficulties. Being troubled with epileptic fits, during which she uttered incoherent words, she had been trained by the Romish ecclesiastics to pretend visions and revelations, exhibiting a letter said to have been written from heaven by Mary Magdalene. She attracted a degree of public notice for some years, the immediate object being to encourage pilgrimages to a chapel in her neighbourhood, but intimations were early given through her against the king's proceedings. Warham, Fisher, with More, and other leading characters, were induced to countenance her, though they did not lend themselves to the treasonable designs of her more active confederates or employers. The pope's agent in England also encouraged proceedings so likely to promote their master's authority: the real drift of the scheme at length became apparent. The maid of Kent, as she was called, declared that Henry was no longer king, and that if he proceeded in his present course, he should "die a villain's death," before a day which was named. The king was also warned not to meddle with "the pope's patrimony," the sums exacted from England by the papacy. He was urged to destroy the Reformers and their books, the English Testament in particular.

The friars, especially the Observantines, were active in making known the pretended revelations of this nun, and in attacking the king. One, named Peto, preaching before the king at Greenwich, declared in his sermon that the dogs would lick his blood, as they had done that of Ahab. Other preachers travelled the country, exciting the people against the king, by magnifying the pope, speaking of kings as his vassals. Some of these,

as Hubberdin and Harrison, were of that class of half-crazy enthusiasts, who are often urged upon notice by the more cool and crafty instigators of any public troubles. But a large proportion of the mass of the people were already inclined to the doctrines of the Reformation. Latimer, with others exposed the errors of popery; they taught the way of salvation in a manner deeply interesting, urging the importance of studying the word of God.

The affair now became serious; the nun and her chief abettors were arrested, and declared guilty of high treason. This was in January, 1534, but they were kept prisoners till the pope published the violent decree already mentioned, in March. A few weeks afterwards, the nun, with six of her confederates, suffered at Tyburn as traitors, on April 21. This execution was by regular course of law; it cannot be said to proceed from the Reformation of religion. The persecution against the Reformers was urged forward in July, when Frith was burned alive as a heretic. By allowing the protestants to be persecuted, the king showed that he had no desire to throw off the doctrines of popery, though he was at warfare with the pope.

An oath of submission to the king, as supreme head of the church, was now required. This, though an unfair test, brought the question of rebellion to a speedy issue; in like manner the questions of the Romanists concerning the real presence in the sacrament, served as a test to ascertain those who differed from the church of Rome, on the all-important question of justification. In April, 1535, five monks and priests were accused of rebellion; in June three more. They were found guilty and executed as traitors, after refusing the oath of supremacy, upon taking which they would have been pardoned.

A more lamentable execution followed. Fisher, bishop of Rochester, was beheaded. He had been imprisoned for his concern in the imposture of the nun, and declared guilty of misprision of treason, (which means the knowledge and concealment of the treasons of others,) upon his refusing to take an oath setting aside the title of the princess Mary to the crown. He remained in prison till the May following, when the pope favoured him by appointing him a cardinal. This dignity was conferred by sending a scarlet hat to the party. Henry hearing of the

honour intended for one, whom he deemed a rebel, declared he would not leave him a head to put the hat upon. But mercy was offered upon condition of his acknowledging the king's supremacy, which would be renouncing the papal authority. Fisher refused, and was executed as a traitor on June 22.

A few days afterwards, Sir Thomas More was beheaded. He was charged with treason, and declined the pardon, which was offered if he would take the oath of supremacy. The execution of these two learned and virtuous men was a serious blot upon Henry's character. It is a mournful proof of the extent of political and party rage; but it also shows the school in which the king had been trained. The term political is here used advisedly; for the question of supremacy was wholly political, and there is no reason to believe that Henry wished to proceed to extremities with the sufferers, whose deaths have been noticed, upon any other ground. His self-will would have been gratified by their submission, which he was more desirous to obtain than their blood. But their firmness irritated his pride and impatience of contradiction: we see the result. These executions did much to render the temper of Henry more fierce and sanguinary, as the taste of blood has been observed to inflame the temper of animals. In human minds, the embittered feelings of self-accusation often carry an individual to additional and blacker crimes, as we find by many examples in Scripture. Sin is a downward road. Perhaps the recollection of Fisher and More made Henry increasingly reckless of the lives of others, though their deaths must not be ascribed to his will alone. Whoever has looked into the complex state of the affairs of the nation at this period, with the various negotiations, conspiracies, and treasons which had resulted from the crooked proceedings of Wolsey, will see that these contributed much to cause their unhappy fate. Documents which yet remain, show that the treasonable practices of many of the sufferers were encouraged by the emperor.

One of the most touching among the circumstances connected with the last days of these venerable men, is the language of More to his judges when they pronounced sentence upon him. He concluded thus: "I have nothing farther to say, my lords, but that as

the blessed apostle St. Paul was present and consented to the death of Stephen, and kept their clothes who stoned him to death, and yet they are now both holy saints in heaven, and shall there continue friends for ever; so I verily trust, and shall therefore heartily pray, that though your lordships have now been judges on earth to my condemnation, we may yet hereafter all meet in heaven to our everlasting salvation: and so I pray God preserve you all, and especially my sovereign lord the king and send him faithful counsellors."

It is painful to observe that his character, like that of his master, had deteriorated. Once entertaining enlightened views, his mind had not gone forward to throw off the errors of popery, and he fell a victim to political persecution as he had caused many to suffer by his religious intolerance. Hall, a contemporary writer, observes respecting him: "I cannot tell whether I should call him a foolish wise man, or, a wise foolish man; for undoubtedly he, besides his learning, had great wit, but it was so mingled with taunting and mocking, that it seemed to them that best knew him, that he thought nothing to be well spoken, except he ministered some mock in the communication; insomuch that when the hangman knelt down before him, asking him forgiveness of his death, as the manner is, he said, 'I forgive thee, but I promise thee, thou shalt never have honesty (honour) of the striking off my head, my neck is so short.' Also when he should lay down his head, he having a great grey beard said to the hangman, 'I pray you, let me lay my beard over the block, lest you should cut it.' Thus with a mock he ended his life." Certainly to mock at the approach of death was no proof of real wisdom, but the reverse. This glib temper seems to have been a besetting infirmity of More, and to have grown by indulgence. His death excited much abhorrence among the learned men on the continent, while it did much to widen the breach between Henry and the court of Rome. It is said that when the king heard of his execution, he told queen Anne, "Thou art the cause of this man's death," and secluded himself in his chamber for some hours. It is not probable that she had directly influenced Henry to cause More to be beheaded; he might mean, that his union with her had led to that train of events,

which had resulted in the death of More; and when feelings of deadly hatred are once roused, even a gentle female may become indifferent to sanguinary measures.

Here we may close the second period of this reign. Henry was now committed to pursue an arbitrary and reckless course; no human measures of a moderate character, could carry him through the dark tempest which lowered around. Never was there a series of events which more early exemplified the declaration of Scripture, Psalm lxxvi. 10;

“Surely the wrath of man shall praise Thee:
The remainder of wrath shalt Thou restrain.”

Other periods have displayed the direful effects of human wrath on a wider scale, in the horrors of widely extended warfare; but probably at no period did personal hatred ever rage more fiercely through all ranks. It resembled the concentration of solar rays by a powerful burning glass. The sun-beams may scorch a larger extent, and produce a withering effect upon the general expanse of nature; but even the rays of the sun may be rendered more destructive, by being brought into a narrower focus of operation. It was thus in the matters now coming forward; but God caused the wrath of man to praise Him, by consuming “wood, hay, and stubble,” while those parts of the fabric which were formed of “gold, silver, and precious stones,” endured the fiery trial: from thence arose that glorious fabric, the English Reformation, which thus was evidenced to be built upon the only true Foundation.

INFIDELITY.

GOD has permitted infidelity to display itself in its full character, for the warning and instruction of mankind. In all ages, Christianity has been brought into contest with some potent enemy, and in our age it has been brought into contest with infidelity. That system, if system it may be called, has attempted to deprive the good man of his hope, by depriving him of his future existence, and of his God. It has endeavoured to give countenance to vice by removing its fears. Its effects on individuals it is not difficult to trace. Where conscience is destroyed, and the sense of moral obligation obliterated, man is capable of the worst of crimes, and he commits them. This evil has been permitted to exhibit

itself upon a large scale. We have seen it in the seat of government, invested with power; and though under a disguise, it may yet be seen there. Thus emboldened, has it blazoned vices or virtues before the world? We have seen it arrayed in its attributes—massacre and blood; with liberty in its mouth, trampling upon the most sacred rights of man; with peace on its tongue, making universal war. Swollen with excessive vanity, it has despised all lessons of experience, and thrown down all ancient institutions to make room for its own babel. It has given rise to the grossest aggressions upon nations; aimed at universal empire; been guilty of the deepest perfidy; and marked its track with horrid desolation. In great states it has been haughty; in small ones, mean and cowering. In the one it pursued its projects with fraud and force; in the other, it has betrayed the most sacred national interests by treachery. This we have seen; and we have also seen it punished in its consequences. He who reigneth, hath permitted it to exhibit the dreadful effects upon the happiness and interests of nations, as well as of individuals, that it might appear that “righteousness” only “exalteth a nation” with durable prosperity; that moral strength alone is political strength; and that whatever advantages nations may obtain by defying both Divine and human laws, the edifice is reared on the sand, which must bury its builders beneath its ruins.—*Richard Watson.*

OLD HUMPHREY ON A TEXT OF SCRIPTURE.

AMONG the multitude of Scripture texts that may be pondered with abundant profit, the one that follows is entitled to our best attention; “Keep thy heart with all diligence,” Prov. iv. 23.

There are times and seasons when God’s people feel what poor creatures they are! An empty bag, a worn-out sword-sheath, a bent and broken thread-paper, would be apt emblems to set forth their weakness, their unprofitableness, and their utter uselessness; but then, perhaps, at the very moment of their conscious nothingness, they cast their eyes on a text of Scripture, so full of comfort that it warms their hearts like a cordial. They are suddenly filled with such courage that they rise up like a mailed giant. Their weakness is cast to the winds, and faith so girds them like a

girdle, that ere they are aware, their hearts feel strong.

When the wise man gave the injunction, "Keep thy heart with all diligence," he was aware that what he enjoined was no easy thing to accomplish. A tiger, taken fresh from the jungle, may be securely caged, and an untameable hyena may be shut up with bars of iron, so that he can do no mischief; but what cage, or what kind of bars can keep the heart secure?

No wonder that Solomon should make use of the words, "with all diligence," or, as the margin reads, "above all keeping;" for when we have to do with that which is "deceitful above all things, and desperately wicked," all the diligence we can exercise will not be found more than the case requires. But a word or two with you about the heart; and, first, let me make one remark respecting myself.

Old Humphrey often finds his heart, like the inn at Bethlehem, so crowded that there is no room for the most worthy of all guests. Like the temple at Jerusalem, it is so occupied with worldly affairs, that a heavenly hand is needed, with a "scourge of small cords," to drive out the sellers of oxen, and sheep, and doves, to pour out "the changers' money," and to "overthrow the tables," that the place which ought to be a house of prayer, may not be "a den of thieves."

At such times as these the chastening is hard to bear, though I have reason with a mighty voice to cry aloud, "Bless the Lord, O my soul, and all that is within me, bless his holy name. Bless the Lord, O my soul, and forget not all his benefits," Psalm ciii. 1, 2. If you would take the admonition of one who has paid for his experience; if you would have the Father of mercies visit you with a smile instead of the rod, let there be room for him when he comes. A heavenly guest should find heavenly furniture in the chamber where he sojourns. "Keep your heart with all diligence."

There is nothing more difficult in the whole world to keep than the heart, seeing that ten thousand temptations are ever persuading it to go astray. I must not, however, overwhelm you with difficulties; therefore before I go a step further, let me tell you, that when once you are found looking up to the Strong for strength, and the Wise for wisdom, to keep your heart with all diligence, half your difficulties are done away. You will not have your labour

alone for your pains. You are not "sowing the wind," and, therefore, a better harvest awaits you than "the whirlwind." The bee that sucks the most flowers by day, will bring home the most honey before night, and so shall it prove with the diligent keeper of his heart. "The soul of the diligent shall be made fat."

"Keep thy heart." How? In the fear and love of God, in the narrow way that leadeth unto life. Keep it, fleeing from sin and following hard after holiness: "With all diligence." Why? Because it is prone to wander; because it requires all thy care; and because, if thou art not diligent to keep it, it will be diligent to deceive thee, and to do thee evil.

Some use diligence, and find reason to repent their labour. They secure riches and fame, and almost gain the summit of their hopes; but as their hopes are earthly, and they have nothing left, all is, with them, "vanity and vexation of spirit." There is for them no peace at the last.

But he, who with diligence keepeth his heart, though he lose all other things, shall find himself a winner. He may "sow in tears," but he shall assuredly "reap in joy."

The heart is a lamp, which the High and Holy One has intrusted to our care; keep it well trimmed then, keep it with all diligence, let it not resemble those of the foolish virgins, who took no oil with them; but rather look unto God for fresh supplies of his grace, that you be not terrified at the midnight cry, "Behold the bridegroom cometh, go ye out to meet him."

The heart is a ship; keep it with all diligence. Look to the hull and the rudder, the masts, the sails, and the rigging. Have an eye to the crew, and take especial care of what merchandize you put aboard; mind that you have plenty of ballast, and that you carry not too much sail. Mind you have a heavenly Pilot at the helm. Be prepared for storms, for you will have them, whether you are prepared for them or not. Encourage the hope of a fair voyage and a happy arrival at a heavenly haven.

The heart is a temple. "Know ye not that ye are the temple of God?" Have a care that you keep it with all diligence; keep it pure and undefiled. Let the ark of the covenant be found

within it. Let your prayers be set forth as incense, and the lifting up of your hands as the evening sacrifice. Let your offerings be without spot or blemish, remembering that "the sacrifices of God are a broken spirit," and that "a broken and a contrite spirit he will not despise." Dedicate the temple of your heart to the Lord of lords and King of kings, and use all diligence in seeking that it may be filled with his glory.

The heart is a besieged city, and liable to attacks on all sides. Go round about it; tell the towers thereof, and mark well the bulwarks; while you defend one part, keep a good look out on the other; while you build up the bastion here, let not the gateway be left defenceless there. Shells may be thrown over the walls, and sappers may mine a way under them. Be alive! be diligent! post your sentinels! have a watchword! take care who you let in, and who you allow to go out. Muster your troops, and see that there be no traitors among them. You have plenty to do, and plenty to attend to; keep, then, your heart with all diligence.

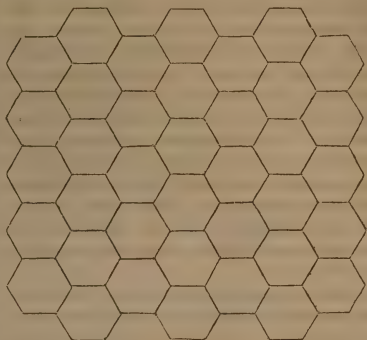
I might run on at this rate for an hour, ringing the changes on the several thoughts that occur to me; but if I did, it would only be to enforce the plain Scripture text, with which I began, "Keep your heart with all diligence, or above all keeping." For the last time, then, "Keep thy heart with all diligence," because in keeping of it there is great reward. He that keeps his heart diligently, does the work that God would have him to do, and he that does God's work will receive God's wages, aye, and God's favour into the bargain; and "in his favour is life," yes, life everlasting.

CELLS OF THE HONEY BEE.—No. I.

THE first engraving in the next column is intended to show the manner in which the common honey bee forms its combs and cells; and to display further the scientific principles upon which it works, as if it had been taught by its Creator to be a geometrician.

The first peculiarity we observe in the "waxen structure," is the shape of the cells; they are all perfect hexagons, or six-sided figures. Why is this? One obvious reason is, they admit of being put together without leaving any space between them: there is no room lost.

Nature (by which we always mean the Great Author of nature) thus teaches this skilful labourer to economize both space and material. There are two other figures only which will allow of their being thus put together without space being left between them; these are the triangle and the square. It will however be instantly perceived that neither of



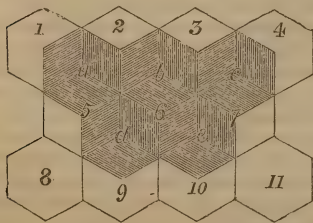
these would be so suitable as the hexagon, for several reasons. First, it would not be so suitable for the habitation of the future insect. The body of a bee is nearly round, or more properly cylindrical: this form then is best adapted to the shape of its intended occupant. Secondly, this form is stronger than either the triangle or the square, inasmuch as it approaches more nearly to that of a circle, which is the strongest of all: it partakes thus of the strength of the arch. Thirdly, this form is made with a smaller quantity of materials than either of the other figures we mentioned before. As the cell must be large enough to contain the body of the bee, it will be seen instantly, that in a triangular or square cell there would be a waste of matter at the corners. And, in fact, so evident is this, that the cell may be said to be formed out of an equilateral triangle with the corners cut off; as will appear by the following diagram. This form then,



namely, the hexagon, we find to be the most suitable, and therefore the most proper of any.

We may perhaps be allowed to mention here one of the numerous instances in which reflecting men have availed themselves of the suggestions offered by the works of nature. It is well known to those who are conversant with nautical affairs, that it is a matter of the first importance to economize the comparatively little room which even a large vessel affords for the stowage of stores, etc. Now, in the article of Ship Biscuits, which were formerly always round, there was, owing to their figure, a considerable loss of room in the package of them. A simple expedient has been adopted, by which this is entirely obviated: the biscuits are all cut by a machine in an hexagonal form; and as they are all made with undeviating regularity, no space is lost. Thus the humblest of the works of God are pregnant with instruction to those who are anxious to obtain it.

But our subject is yet far from being exhausted. A comb, as it is termed, is a cake of wax, pierced with cells on both sides, and fixed in a vertical position to the upper part of the hive. All the combs are parallel to each other; they are from one to two inches thick; sometimes more; perhaps the average may be an inch and a half. Now as there are cells on each side of the comb, there must of course be a partition between them. We shall see that the manner in which the cells on one side are arranged, with respect to those on the other, is very peculiar, and adapted for a special purpose. We have subjoined a cut to illustrate the matter more clearly.



The cells numbered 1, 2, 3, etc. represent the upper side, while those marked *a*, *b*, *c*, etc. denote the lower. It will be seen that the cells do not correspond, so that one shall be exactly opposite another; but that the cell marked *a*, for instance, on the lower side, is placed

under three cells on the upper side, in such a manner as to cover one-third of each of the cells 1, 2, 5. In like manner *b* is situated so as to include one-third of each of the cells 2, 3, 6. The cell *c* includes one-third of 3, 4, 7; *d*, one-third of 5, 6, 9; and *e*, one-third of 6, 7, 10.

This arrangement is productive of great additional strength and firmness, involving at the same time no sacrifice of higher objects, as is too frequently obvious in works of human ingenuity, where one evil is often remedied by incurring another. Here, on the contrary, as always appear to be the case, when we examine the works of God, we find a simple, yet beautiful and exquisite contrivance obviates the difficulty, and out of weakness brings strength!

"How sweet to muse upon his skill displayed,
Infinite skill in all that he hath made!"

There is still another consideration of a scientific character growing out of this subject. If we examine the bottom or floor of these cells, we shall find that they are not flat, but sloping, being formed of three inclined planes, of a rhomboidal form, as represented in each of the shaded cells *a*, *b*, *c*. It is evident that a flat partition between the cells would not have been so strong as one formed of inclined planes, in something the same way as the rafters of a house are inclined to each other. Now it is found that there is one certain angle at which these should meet, in order to insure the greatest possible strength with the least expense of material. Mathematics afford the means of determining this question; and extraordinary as it may seem, it has been satisfactorily ascertained that the bees always form the floors of their cells at precisely this angle! Here let us pause and admire the skill of the little architect. How wonderful that that which may appear to many as an insignificant insect, should be endowed by a bountiful Provider for its wants, with an instinct which mocks the shortsightedness of human ignorance; which with unfailing regularity, and in the most simple yet perfect manner, provides against contingent difficulties, and secures the greatest amount of positive advantage.

In our next, we propose giving some further observations on this subject.

E.

STORM ON THE BANKS OF THE WYE.

If you know the river Wye, you know that it runs in deep romantic hollows, that its high banks are clothed with woods and coppices, that its course is serpentine, and that its stream after the rains, is very rapid; at some places confined within narrow limits, and at others spreading wide into a mighty stream. Near this river I was once overtaken by a storm. Not soon shall I forget that night; for if ever the winds issued forth in their wrath, and the ebon canopy of the skies poured down a deluge on my head, it was then.

I had quitted a farm-house to walk six miles, on my return to the hospitable abode of a friend whose guest I was. Evening was at hand, and the skies suddenly put on a threatening appearance. A sultry stillness, a gathering of dark clouds, and a foreboding suspense prevailed. A sense of awe and danger gave solemnity to my mind. Had I been alone, I should have been less fearful; but little Emily, my companion, was ill prepared to combat with the storm.

We hurried on by the pot-house called "The Hole in the Wall." We passed the ferry where the horse-boat was moored to the shore, and had almost reached the wood, when the storm came upon us. The heavens were darkened with the burdened clouds, except in one point, towards Aconbury hill. At the extreme horizon in that direction was a space of a lurid red, which gave a deeper gloom to the frowning sky.

At first a few big, heavy, solitary drops came down, but they told us plainly what was to follow. The wind began to be heard among the trees, and all at once, as we looked up to the coal-black sky, crash came the thunder clap, as if it would crack the solid earth beneath our feet.

Every one knows the astonishing influence of a sudden clap of thunder, under any circumstances; but in a dark night, when we are in a lonely spot, and at a distance from a comfortable shelter, it comes with additional solemnity. We sensibly feel that God is in the storm, that he is abroad in the awfulness of his power, and that we are altogether dependent on his merciful care. "The Lord hath his way in the whirlwind and in the storm, and the clouds are the dust of his feet. Who can stand before his indignation? and who can

abide in the fierceness of his anger? his fury is poured out like fire, and the rocks are thrown down by him," Nahum i. 3. 6.

Though the place was lonely, yet as a road ran between the river and the wood, even at night, the footfall of a passer-by was not uncommon. Indeed on most nights of the year, we should have seen or heard some of the labourers of the surrounding farms coming from their toil, or an errand woman returning from a neighbouring market, or a farmer on horseback jogging from a friend's house towards his own homestead; but no! Not a human being came near us, as the storm was advancing.

Darker and darker grew the threatening heavens. The wind, the thunder, and the rain, seemed to have reserved their strength to grapple together, for in a little space the hurricane rode in his strength.

High over head and around us were the warring winds, and far down below in the valley, the wild sweep of the rushing waters. We could discern the objects that were near, the oak seemed to writhe in agony, and the tall and bulky elm was as a sapling in the hand of the storm. But we did not venture to stand under any tree: such a place would have been exceedingly dangerous; many seeking a refuge there have been struck dead by lightning, and I mention this as a caution to every one of my readers.

If a storm be thus terrible on the land, what must it be on the tempest-tost ocean, when mariners are driven to their wits' end, and the billows are strewn with wrecks!

These are seasons in which the accusing conscience wrings from the trembling penitent promises of amendment, and the heart of the infidel, quailing within him, confesses by his fears, that "there is a God that judgeth in the earth." These are seasons, too, in which, in the midst of mysterious awe, and thrilling consciousness of danger, the humble Christian reposing in God's unspeakable goodness, feels an inward sense of security, being able to say:

"A Father's hand the skies o'erspreads;
He guides the tempest wild;
And he will kindly guard the head
Of his defenceless child."

Little Emily meekly endured the tem-

pest, looking up to the darkened canopy above her, till the thunder claps came fearfully near, and the fiery flashes seemed to play close around us. For a moment the storm subsided, but it was only to concentrate its strength, and all at once it flung on the raging winds the gathered burst of its accumulated thunder. Emily clung closely around me, and hid her face in my bosom.

As I looked in the direction of the river, I saw a red light sailing down the broad stream. It was from a barge. How often have I heard from the river's brink, the awful imprecations of a blaspheming bargeman. It was not, however, likely that in such a night an oath would be heard, or that the name of the High and Holy One would be taken in vain. Drenched to the skin, we plodded along sometimes in the road, and at others over the broken ground that skirted the river.

As the storm abated, we looked up as chastened children in humble thankfulness to our heavenly Father, for his merciful preservation. Oh that we were more sensible of our manifold mercies! "Oh that men would praise the Lord for his goodness, and for his wondrous works to the children of men!" Psalm cvii. 8.

On the morrow we heard of the ravages of the storm. The river had overflowed its banks. The meadows were flooded, and the ferries were impassable; neither Fidoe, nor old Wigley, would venture across. Near Mordiford, a large barge was stranded; the top of the mast only was to be seen above the water; two lives were lost. At Sellack, the water had risen to the churchyard wall. At Nottingham, and Basham, and Paulston, and Pengethly farms, orchard trees had been beaten to the ground; and at Stoke and Holm-Lacey, many a giant oak, the growth of centuries, had been torn up by its deep-struck roots.

At Hoarwithy, at Capler, and King's Caple, it was the same; mischief had been done every where, trees levelled to the ground, and houses unroofed: and under an oak, sixteen or eighteen sheep were struck dead by the lightning.

THE DARK VALLEY MADE LIGHT.

It was just at the close of that most beautiful portion of our American autumn, called the "Indian summer," that I was

led by business to travel from the capital of Virginia, into the range of middle countries lying under the Blue Ridge. My route, through a part of its course, lay along the valley of the James, more properly called the Powhattan, in memory of the powerful chief whose dominions once skirted this noble stream. It was in the latter part of the month of November. The evenings were clear and cool. The white frost on the hedges of locusts and persimmon sparkled brilliantly in the morning sunbeams. During the middle hours of the day, the sun imparted a genial warmth. The extended forest of oak and hickory, intermixed with evergreens, had either cast their foliage, or were clad in the last robes of autumn, exhibiting all the various hues and tints of the season. A thin light haze hung upon the verge of the distant mountains, as they were occasionally seen through the openings, or from the swells of land over which my road passed.

There was something both in the scenery and in the season in its attendant circumstances, which gave me sensible delight. Reflecting, as I pursued my journey, on the sweet vicissitudes of the seasons, and their return again in a perpetual circle, I could not help saying to myself, Oh that I could again return to early boyhood—to my first spring of youth! Then would I seek grace to redeem the time and the opportunities that have been lost, and to be prepared for a manhood that should be as happy and graceful as this abounding and mature season of the year.

Such were my passing reflections, when on a Saturday night I arrived at a place where I determined to make my home till the sabbath had passed. After the requisite attention to my faithful beast, and to my own refreshment, I availed myself of the well-known hospitality of the people, and walked out, some half-mile, to call upon a family hitherto unknown to me except by name. With this interesting circle, the evening soon passed away. As I was about to take leave of them, I inquired if there was to be any preaching in the neighbourhood next day? "No," replied the lady of the house, "we have preaching but seldom. We have no shepherd to take care of us; but some of us begin to feel that it is time for us to take heed to ourselves." The last sentence she uttered with deep emotion,

and then added, "We shall have a sabbath-school to-morrow about a mile from this; we commonly go there when we have no preaching. We shall hope to see you there; and perhaps you will have a word to speak to us."

Let the reader imagine a tract of country beautiful and fertile indeed, but inhabited by a scattered population, whose dwellings are widely separated from each other by the intervention of large plantations. Let them conceive of the property as being very unequally distributed; the wealthy educated and hospitable, but imbued with scepticism, and devoted to pleasure; the poor, very poor and very ignorant; and the whole population without schools, and having no stated religious worship on the sabbath; and he will have before him the true idea of the moral condition of this, and some other portions of the country at the time of which we write. This state of things had resulted, naturally enough, from causes which had been brought into operation about the close of our revolutionary struggle. The few churches which had been previously gathered, were either broken up or very much deranged. The writings of Godwin and Paine were read by many in the higher classes, and their poison had diffused itself among other parts of society.

Here, then, was a flood of infidelity rolling its turbid streams over the finest portions of our land, while there was little influence of Christianity and of Christian institutions to resist it. There remained but little sense of religious obligation among the people. The public worship of God was not sustained; and, when occasionally the gospel was preached, not many attended. The sabbath was desecrated, it had become a day on which men did their own pleasure. Luxury was the idol of those who could afford to worship her. The unfortunate constitution of society, in our southern country, opened the way for the free and unresisted operation of all these injurious influences; and these influences had now been prolonged for half a century. With religion had departed, of course, the best concern of the people for the education of their children; and many in the lower walks of life had grown to manhood without the ability to read.

Such was the moral condition of the sweet valley of ———, when a young

lady, who will be known to the reader under the name of Martha Atkinson, returned thither to the mansion of her fathers. She had just finished her education at a public school, and for this purpose had been living for two years or more in the pious and happy family of a maternal uncle, who resided in a neighbourhood that had recently been blessed with a large effusion of the Holy Spirit of God.

In these scenes the attention of Martha had been deeply interested in a new subject. Her heart had been drawn to place its affections on the Saviour. She had become happy, by becoming a Christian.

Miss Atkinson had a most amiable and cheerful temper, uncommon mental endowments, and a symmetrical form, with a countenance and features which were a true index of the soul. Education had improved these gifts from God, and grace had now given the touches to a finished character, that made happy its possessor as well as all around her. So harmoniously were the pure virtues of Christianity mingled in her consistent life and cheerful conversation, that her most thoughtless companions were attracted. There was something in the expression of her countenance, in the tone of her voice, and in the very glance of her eye, which told that she held communion with a purer world.

On returning home, the subject of our sketch found very few persons in the neighbourhood who could sympathize in her new feelings. Her parents were full of natural kindness and affection. They were indulgent even to a fault. Intelligent, but sceptical; they were cherishing hopes of well-being hereafter, which had no connexion with Christ. Devoted to pleasure, and to the idea of "shining" in the world, they could not understand the feelings of their daughter, nor appreciate her new objects of pursuit. She had been a teacher in a sabbath-school, while residing in the family of her uncle; and she longed to be again employed in this delightful and hopeful work. But she was now in a new moral atmosphere. Here was no stated worship of God, no sabbath-school, and (I had almost said) no sabbath. Her situation was trying to a young Christian. The state of things to her was painful; and equally so was the fact, that the people were content to have things remain as they were.

But a few weeks passed away before Miss Atkinson resolved attempting to collect the children of the neighbourhood, and establish a sabbath-school. She disclosed her plan to her parents. They discouraged her, intimating, that assuming such a responsibility, and showing such condescension, would be unsuited to her age, sex, and station. A new difficulty arose: for Martha confided affectionately in her parents, and feared departing from the proprieties of her sex. Her natural diffidence was shocked by the thought of stepping beyond her sphere. In these embarrassments, she wrote to her uncle, stated the circumstances, and asked his advice. In him she found a valuable friend. His counsel, which was promptly given, made her course of duty plain, and removed the chief objections of her parents.

A door was now open: she had resolved to enter it. But obstacles still lay in her path: "Where should her charge be gathered?" (for there was no school-house, or church at hand.) "Who would assist her in her work? And what will the pleasure-loving world think?" were inquiries which sometimes appalled a young and diffident heart. But that perseverance, of which the love of Christ is the soul, will commonly find the means of accomplishing its end. So it proved in the present instance.

After looking in vain for a suitable room, in which she might gather her little flock, she was one May morning riding with her father over the plantation to enjoy the air, and view the crops. As they rode by the "Quarter,"* she said, with a smile and a manner which had often been effective: "Papa, what a fine place our granary would be for my sabbath-school? If you have no objection, I will get Dick to clear it out, and mend the windows, and make some seats; and then, you know, I could teach old Burdick and his wife, and their children, to read. And you know, papa, you were saying the other day, you wished I would set up a school and teach the overseer's family."

The argument prevailed. The irreligious father, who was afraid lest his daughter should lower her own dignity, or that of his family, by assuming the office of Sunday-school teacher, was now

conquered by the least exceptionable weapons in the world, and obliged to surrender all his objections. The services of Dick were the next day brought into requisition, and the granary was soon fitted up for its new purpose. Dick was to be a scholar as a reward for his toil. Notice went forth that a sabbath-school would be opened on the next morning at Mr. Atkinson's granary!

The sabbath morning came. It was a bright and glorious one. At the appointed hour Martha went to the scene of her new labours, and found it thronged with waiting pupils. A blush suffused her cheek as she entered and beheld some twenty adults, who she rightly supposed had come to place themselves under her tuition. Recovering confidence and composure, she proceeded to arrange her new charge in the best way she could, and spent with them one of the happiest sabbaths of her life.

Encouraged by this unexpected success, and feeling that she must have some assistance, she applied herself, during the ensuing week, to this object. She readily secured the co-operation of some female friends, while she accepted, with peculiar pleasure, the unexpected and volunteered services of her eldest brother, who lived on an adjoining plantation.

The chief responsibility, however, rested upon our young disciple. She was the bright sun in its little system. All looked to her for counsel. She was now the light of her neighbourhood. She never seemed, even to her cautious father, to go out of her appropriate sphere, and yet she caused the blessed influence of her cheerful piety to be felt in every dwelling around her. She would often ride on horseback, or in her father's carriage, (driven by trusty Dick, who had become absorbed in the same good work,) to visit the abodes of the ignorant and poor, for five or six miles round. By these labours, new acquisitions were made to her charge; the class under her particular instruction, consisting of eight or ten little girls, was collected by these visits.

Miss Atkinson continued her unwearied efforts for nearly three years. As the result, many from middle age to childhood were taught to read. Copies of the Scriptures were multiplied and placed in every family; the Spirit of God attended the word which was occasionally preached, and several pupils

* This is the name applied to the cluster of buildings usually seen somewhere about the centre of the southern plantation; embracing the log-cabins of the slaves, the overseer's house, granary, barns, etc.

of different ages, some teachers and some parents, became, there is reason to hope, the children of God. From these a church was afterwards formed, to which a young clergyman was sent as a missionary. Thus, by the instrumentality of one young lady, the whole aspect of society, in that sweet spot, has been changed. The dark valley was made light.

But the subject of our sketch was not long to enjoy, on earth, the contemplation of these fruits of her labours. Her humility, probably, did not contemplate them as *such*, though they were regarded by others as connected with her instrumentality. She was marked for an early grave. A hectic flush had been seen for several months upon her cheek. And now an increasing cough was gaining such strength, as obliged her to suspend the work which she loved so well. This failure of health occurred in the winter. With the return of spring she was in a measure restored, when she again applied herself, but cautiously, to the sabbath-school. Many hearts were gladdened at her return. In the month of June, while lifting a child five or six years old out of a carriage, she ruptured some vessel about the lungs. Her decline now became more rapid, and in a few weeks it was evident that the attack would prove fatal. This conviction she had for several months, but it gave her no alarm. She was perfectly composed. While her mind was employed in reviews and prospects, her hope in Christ was an anchor to her soul, sure and steadfast. With her to die was only "going home." She had (she said) but one anxiety to disturb her repose. On being asked what that was, she replied: "It is that I have been so unfaithful to the dear children of my class. They have no pious parents; and who will take care of their souls when I am taken home?"

Her mother said to her, "Do not distress yourself, my dear Martha, you have done what you could; God will take care of them. Some of them, you hope, are already converted."

"Yes," replied Martha, "I hope they are; but I want to see them all in the arms of Jesus, whose love is so precious."

This solicitude seemed to rest heavily upon her heart, and she would often say, "*I wish I had prayed more for them. I wish I had prayed more for my own soul.*"

Her supposed unfaithfulness as a Christian, seemed to be the burden of her thoughts. Yet all who knew her regarded her as an example of fidelity, and a model of wise devotion to her work. Her strength was evidently wasting, and her day of dismissal from earth was approaching: of this she was perfectly sensible. She therefore solicited her parents, with great earnestness, that her sabbath class might be sent for to give them her blessing, and commend them to God. But the physician thought her too weak to bear the excitement of such an interview as it was anticipated it would be, and he dissuaded her from it. Some days after, she appeared much better; she renewed her request, and urged it with so much earnestness, that it seemed best to gratify her. The message now went forth through the neighbourhood, and in a few hours the children of her class were assembled, bathed in tears, around the bed-side of their beloved teacher, to receive her last lesson. God gave her strength for this occasion. She sat up, supported on her bed, and addressed them individually and collectively, in a full, clear voice; and then in prayer committed them to God. Words were spoken that were not soon forgotten. It was a scene of melting, thrilling intercourse. It seemed like one coming back from eternity, to do the work of time over again, and to do it better. About ten days after this, the subject of our sketch was taken "home" to that glory that is to be revealed. Her premature death was in no way the effect of her Christian efforts, but was decided to be the result of disease, the elements of which had been exhibited in childhood. The inhabitants of the valley of — were sincere mourners; but none had so much cause for grief as the young clergyman, whom Providence had sent to reap the spiritual field that had been cultivated by her hands.

Reader! wilt thou let the moral lesson of this example be impressed upon thy heart? Then may some dark valley be made light by thee; and thou shalt find a place among "those few,"

"Who, in the prime of early youth,
Wisely have shunned the broadway and the green;
And labour up the hill of heavenly truth.

* * * * *

Their care is fixed, and zealously attends
To fill their lamps with deeds of light,
And hope that reaps not shame."

American Christian Keepsake.

"HE IS BUT A CHILD."

WHERE this expression is used to a good purpose once, it is made use of twenty times to a bad one. The practice of severity towards young people is not a likely way to reclaim them; they require great forbearance, and when one has committed an error, it is well to remember, that he is but a child. But if severity be a bad thing, indulgence is a bad thing too; and if every fault is to be excused, and every offence left unpunished, because the offender is but a child, no wonder that so many bad men are to be found in the world.

Turpin, the highwayman, was once but a child; and if his childish errors had been properly corrected, most likely he would never have become a highwayman. Burke, the murderer, was once but a child, and no doubt, unreprieved; childish offences were the beginning of his murderous career. If, then, we would not wish our children to become robbers and murderers, we must set our faces against excusing the errors of any one of them, merely because he is but a child.

This expression, "he is but a child," is more frequently in the mouth of an indulgent mother, than in any other; and thus she, who would willingly be the best friend in the world to her son, becomes his worst enemy. "He is but a child," has led many a man to crime and dishonour, and brought him to a shameful death. If this be a truth, it is a truth worth a mother's consideration; for who is there that feels like a mother the disgrace and ruin of an unworthy son?

If the gardener, who prides himself in rearing up his trees in a straight and proper form, were to pay no attention to their turnings and twistings, while they were young and tender; if he were to satisfy himself with saying, "Oh, it is but a twig," and so let the twig grow on until it became a tree; what sort of trees do you think he would have? Crooked they would be, and crooked they must remain; for it would be past his power to make them straight. Is it easier then to amend the crooked mind of a child, than the crooked stem of a tree? or does a mother love her offspring less than the gardener loves the produce of his garden? Surely not, and therefore mothers will do well to act as this gardener does; to begin the course of training betimes, and to leave off making the poor apology for the error of her offspring, "He is but a child."

Harry Archer had a kind mother, so far as letting him have his own way went, but a very unkind one as it respected his happiness as a child, or his respectability when he became a man. Whenever Harry was complained of for throwing stones, using bad language, and getting into mischief, his indulgent mother thought that a great fuss was made about a little matter; that people had no consideration, and ended her remarks with, "Poor fellow! he is but a child." The consequence of all this was, that Harry threw stones more than ever; got worse and worse in his language; and became so mischievous, that he was the plague of the whole neighbourhood.

Now as Harry's mother had never fixed in her own mind any particular time to begin to correct her son, so he went on month after month, and year after year, growing worse and worse, and she still continued to excuse his faults in the old way, saying, on every occasion, wherein his errors required correction, "He is but a child."

At last Harry went to a boarding-school at some distance from home. His mother, who accompanied him, gave a particular charge to the master, in Harry's presence, to use her son kindly; not to expect too much from him; nor to be harsh with him for any little faults he might commit: her parting words to him were, "Bear in mind, sir, he is but a child."

Harry's master certainly did bear with him, until he had committed so many faults, that it became absolutely necessary to complain. A letter was despatched to his mother to tell her, that not only had Harry sadly committed himself in using shameful language, and in telling many untruths, but that he had broken three squares of glass at different times, in the windows of a house adjoining the school, and stolen a shilling from the box of one of his school-fellows.

Harry's mother replied to this letter by saying, that she hoped in time her son would get the better of the habit he had fallen into of using bad words; that, perhaps, his school-fellows had made more of the fibs he had told than what was true; that she would willingly pay for the broken glass, and return the shilling if her son had really taken it; and again reminded the master that he ought not to be too severe towards so

young a boy. "You must remember," added she, "that he is but a child."

In a little time, Harry was past all bearing; for child as he was, he did more mischief, gave more trouble, committed more acts of dishonesty, and got into deeper disgrace, than any boy that had ever entered the school. He was dismissed as too bad to be reclaimed, and returned home to his indulgent mother, who did not fail to speak hard words against his master, as a man of no feeling. "How could he expect Harry to be faultless? If the boy has been a little naughty, why, he is but a child!"

In course of time, Harry was put apprentice, and a pretty apprentice he made. His master, who was a weak man, soon became heartily sick of him, and his mother could no longer bring forward the excuse, "He is but a child." Harry neither kept his hands from "picking and stealing," nor his "tongue from evil speaking, lying, and slandering:" he joined a set of bad companions, and before he had served half his apprenticeship, he got thrown into prison for breaking open a chest of drawers, and robbing his master. His mother blamed Harry for his misconduct, and his master for not watching over him more carefully, but she never blamed herself. It never once occurred to her, that neither Harry nor his master was half so much to blame as she was, though all the evil that occurred was brought about by her indulgent folly in excusing his errors, and in repeating the observation, "He is but a child." If injudicious parents would but consider the shame they bring on their children, and the sorrow they bring on their own hearts, by silly indulgence, and the habit of passing over their faults, surely they would act more wisely! Surely they would kindly and firmly correct the failings of those they love, and never encourage any one of them in bad habits and evil ways, by the observation, "He is but a child."

Harry, owing to some little error on the part of his master, who appeared against him on his trial, was set at liberty, and then he became the plague of his mother's heart. She had to support him in idleness and extravagance; to buy him off when he enlisted as a soldier; to pay the debts he contracted; and to make many people amends for the injury he had done them. Poverty came upon her, and

loudly did she complain of her ungrateful son; but still her own error was overlooked. When she first began to excuse Harry, and to say, "He is but a child," she began to sow that seed of bitterness that had sprung up around her so abundantly. Harry was again thrown into jail without hope of escaping; his crime was that of highway robbery; the evidence was clear against him, and he was sentenced to be transported for life.

It was with a burdened heart and a wounded spirit, that Harry's mother went to take leave of her son, and then, while she sobbed aloud and wrung her hands; while the heavy clanking chains of the prisoners rung in her ears, Harry told her to thank herself for what she had to suffer, for that she had brought it all on her own head, by her folly in excusing his faults. "You have been the ruin of me, mother," said he. "If I had never heard you say, 'He is but a child,' I might now have been an honest man."

Harry was sent across the seas as a felon, and his mother pined away and died of a broken heart. Thus a son was driven from his country in disgrace, and an afflicted mother brought down with sorrow to the grave, by that silly and sinful excuse for early errors, "He is but a child."

IRISH BEGGARS.

MR. RITCHIE, when referring to one part of his visit to the sister country, says: "I was not accosted by a single beggar. One man, however, apparently a stranger, whom I saw sitting on the ground, leaning his back against the wall, attracted my attention, by a degree of squalor in his general appearance, which I had rarely observed before, even in Ireland. His clothes were very ragged, and his face was pale and sickly. He did not address me, and I passed by; but having gone a few paces, my heart smote me, and I turned back."

"If you are in want," said I, with some degree of peevishness, "why do you not beg?"

"Sure it's begging I am," was the reply.

"You did not utter a word."

"No! Is it joking you are with me, sir? Look here," holding up a tattered remnant of what had once been a coat, "do you see how the skin is speaking

through the holes in my trowsers? And then, my bones are crying out through my skin. Look at my sunken cheeks, and the famine that's staring in my eyes! Man alive; is not it begging I am, with an hundred tongues?"

Charlotte Elizabeth gives an instance of a different order in a letter from Trim to a friend. She says, "I was constrained to smile at the deportment of a group of beggars. Knowing as I do how entirely this class of the poor Irish are driven to subsist on charity, I never like to refuse a trifle: however, to rid myself of much superfluous importunity, I addressed the eager applicants, on my first alighting, in the easy way that always takes with them. 'Now mind, I am going to stay an hour or two in Mullingar. I shall start from this hotel; and if you will be quiet and not follow me about, I will give each of you something before I go.' This assurance was received by a chorus of blessings pronounced in every imaginable variety of language; and down they squatted on the ground, about the door, with looks so full of glee, that you who are accustomed to the aspect, real or assumed, of the same class in England, would never have guessed at their profession.

"I had, or fancied that I had, numerous wants to be supplied at the various shops which stud the opposite side of the single very lengthy street of Mullingar. On returning from the church-yard, I commenced this course of shopping, and my poor women watched every movement from their station. At last the most wheedling creature you ever saw crossed over to me, and began with, 'Darling lady, I have looked after your blessed steps all the morning: won't I get the halfpenny now?' 'No, for you know we agreed to wait till I should set off.' Just then, the reason of her appeal became apparent; a famished looking creature, whom I had not seen before, presented herself with two pale babes, and began—'She has no family to take care for, and I—' 'Oh,' I interrupted, 'you must not be jealous of each other; you don't know my promise,' which I repeated, including her in it. The poor woman fell back directly, with a still sad, but very thankful countenance. I went to two more shops, and finding the body of claimants likely to increase greatly, and also seeing the near approach of heavy rain, I supplied myself with change, beckoned to

the party opposite, and immediately had the most motley assemblage pressing round me that could be conceived. I was resolved to put their subordination, that is to say, the civilisation of Irish savages, still farther to the test; so I said, 'You must not crowd me, you know; just stand out in a proper line.' It was done immediately; and none had reason to regret their good conduct; on which, by the by, I complimented them greatly. Such a scene would not have done in a more public place; but the hour was so early, and all around so quiet, that there was nothing to prevent it. One remark I must add: when the long delay occasioned by the rain had fairly laid me open to a fresh application from another party, not a creature appeared to ask alms: the former group remained at a distance, others being with them; all had their eyes fixed on us; many raised their voices to send a blessing with us; but some feeling appeared to withhold the approach of every individual. Now, have I not added one more to the many instances that I have in conversation related to you, justifying my assertion that the poorest, the most uncivilised of these despised Irish are, under proper management, the most tractable people in the world? The smile to which I alluded was not one of merriment, but that expression of affectionate good humour without which all the rest had been in vain; at least, though under different treatment a sense of their helpless dependance might have forced them to wait, like hungry, but well kicked-dogs, for a bone, the pleased and gratified feeling that gave such a peculiar alacrity to their obedience, would have been wanting. My first object was merely selfish, the anxiety of a charged mind to escape a teasing annoyance at such a time. By degrees it assumed a better character, and ended in a train of thoughts well calculated to soften the agonizing severity of feelings and regrets purely my own. Some tourists jest with the beggars in Ireland; others execrate, or bitterly complain of them. I don't know whether any are in the habit of trying how far a little relief and plenty of civility combined, will go to neutralize their troubles. Five shillings will carry any one, on this plan, a hundred miles in good humour with himself, and in high favour with the objects of his bounty."



King Henry VIII. presenting the English Bible to the Clergy and Laity. From the original Frontispiece to Cranmer's Bible.

HENRY VIII.

THE position of Henry was very difficult, during the last ten years of his reign. In order to have right views of the events which followed his throwing off the papal yoke, it is necessary to keep in mind the high ideas of royal prerogative then entertained. The monarchs of the Plantagenet line had continually been forced to bend before their nobles, but the power of the aristocracy was materially diminished by the civil wars of the Roses; while the commonalty gained strength to afford efficient support to the crown, yet not enough to claim much consideration from the ruling powers. Under the Tudors, the royal prerogative reached its fullest extent in England; the peculiarity of the times, with the abilities of Henry and Elizabeth, were favourable to the exaltation of regal power; also, notwithstanding the errors and excesses into which they were occasionally led, it is clear that the commonalty prospered under their sway. One circumstance which mainly contributed to this prosperity, was the downfall of popery; the removal of that fabric of superstition and ecclesiastical tyranny, which had been reared at the expense of the best interests of the nation.

We have seen that the pope was directly opposed to Henry and his proceed-

ings, and that the monastic orders were actively engaged in stirring up rebellion. The new pope, Paul III., ordered the king to recall the divorce and the laws against the supremacy, or to appear at Rome to answer for himself. In case of refusal, Henry was declared to be excommunicated, his subjects were absolved from allegiance to him, the nobles were directed to take arms against their sovereign, the clergy were commanded to depart from the realm, and all foreign princes were released from their treaties and engagements with England. The adherents of Henry were to be treated as slaves, and their property taken by any one who could seize it. The actions falsely imputed to Henry by popish historians, are surely far less criminal than the evils here sanctioned, and even commanded by one who called himself the vicar of the Son of God upon earth. Similar measures humbled king John; the threat of them induced Henry II. to submit; but Henry VIII. was a different character, and lived in other times. Though the pope sanctioned this decree on August 30, 1535, he delayed to give publicity to its contents; they were, however, made known to Henry.

The destruction of the monasteries was now resolved upon: this would weaken the papal power; it would prevent the

farther efforts of that body against the king, while the revenues and property would replenish the exhausted treasury; and the destruction of establishments, which, in many instances, were justly hateful for the pride and vices of their inmates, was likely to prove a popular measure. Commissioners were sent forth to visit the monasteries, and report fully upon their state. They proceeded at first to visit the smaller establishments; their evidence clearly showed, that these places in general were wholly perverted from the original designs of their founders. Both monks and nuns were, in many instances, habitually guilty of licentiousness; some, like the prior of Bradley, gloried in their shame, and even produced the pope's sanction for their sinful conduct. Coining and robbery were among the crimes perpetrated, and the grossest frauds were detected. Images were found moved by secret wires; the blood of a duck, renewed weekly, was shown as that of our Saviour; the most absurd relics were collected together. Many of these fraudulent deceptions were openly exhibited to the people at Paul's Cross, and other public places. At Worcester was a highly revered image of the Virgin Mary. When stripped of her ornaments, it proved to be the clumsy carved statue of an ancient bishop. In February, 1536, the parliament sanctioned the suppression of three hundred of the lesser monasteries; their revenues were calculated to be 32,000*l.* per annum; the valuables collected were estimated at 100,000*l.*; and it was evident that a considerable amount had been embezzled. In these proceedings, Cromwell acted as superintendent, under the title of vicar-general, or the king's vicergerent in ecclesiastical matters: thus he carried out the scheme which he formed while under Wolsey's roof, a proceeding which the cardinal originated. At this period, the first legal provision for the poor appears among the statutes of the realm. The monastic system was one great cause of pauperism; its progress, with the change in the value of property, rendered the poor a burden on the country as early as the beginning of the sixteenth century, before the suppression of monasteries. Let it ever be remembered, that the monastic system fostered, and did not prevent pauperism, though the evil was brought more directly into public notice, through the selfish proceedings of many who gained by suppressing those establishments.

The year 1536 was eventful. Early in January, the divorced queen, Catherine, died at Kimbolton. Queen Anne did not conceal her satisfaction at the removal of her predecessor: though the king was affected by Catherine's death, and commanded his attendants to put on mourning, Anne slighted his will, by assuming a gayer garb than ordinary. She soon had cause for sorrow; the premature birth of a dead son, suggested apprehensions, in the mind of Henry, that his second marriage would not be more decisive than the first, as to the succession to the throne. Scripture tells us of the uncertainty of earthly things, and the insecurity of those who hold posts of honour. "All flesh is as grass, and all the glory of man as the flower of grass. The grass withereth, and the flower thereof falleth away." "In the morning it flourisheth, and groweth up; in the evening it is cut down, and withereth." This was realized in the history of Anne Boleyn: the court was a sphere in which she was exposed to injuries and temptations. That liveliness of disposition which had forwarded her elevation, rendered her joyous and unthinking: her enemies watched their opportunity; they availed themselves of the falsehoods and treachery of an infamous and bigoted woman, lady Rochford, the sister-in-law of Anne, to hasten her downfall, by poisoning the king's mind against her. Henry was prepared to listen to these insinuations, for the attractions of another had awakened his regards. The proceedings against the queen were under the consideration of the king and his advisers in the latter days of April, but were kept secret.

On May 1, the king departed suddenly from a tilting match at Greenwich, where he had been present with the queen. It has been said his jealousy was excited by her conduct on that occasion; but a commission had been regularly prepared to inquire respecting her, some days before. Scarcely had she retired to her apartments, before she was arrested, and conveyed to the Tower, where her brother, the husband of the infamous lady Rochford, was also imprisoned with three others, on the charge of adultery with her. On her arrival at the Tower, Anne protested her innocence, and inquired whether she was to be imprisoned in a dungeon; being informed by Kingston, the lieutenant of the Tower, that she should have the lodgings she had occupied before her corona-

tion, the contrast of her present state overcame her: she was seized with a hysterical affection, which frequently returned before her trial. She was carefully watched, and her incoherent expressions taken down, that they might be repeated to the council; but they did not imply any guilty conduct.

The subject of her innocence soon became a party question between papists and protestants: it has been thoroughly discussed; so many documents have been brought forward, that a fair decision may now be arrived at. There is no reason to believe her guilty of the crimes laid to her charge; but her conduct had alienated the king's affections, and showed the levity of a mind injured by prosperity.

Her enemies hurried forward their plans, taking advantage of the king's arbitrary and hasty temper, while her friends had not time or opportunity to investigate the accusations, or to interfere efficiently in her behalf. The charges against her were also urged so positively, that the friends of the Reformation were fearful of giving ground for allegations that they countenanced crime. Cranmer was forbidden to appear at court till sent for: he wrote, however, to the king, pleading earnestly in the queen's behalf; but could not avoid allowing that she was guilty, if the charges were proved. Queen Anne herself wrote an able letter to the king; but while asserting her innocence, she expressed herself in a manner likely to excite the king's anger, so as to strengthen the attempts against her. It appears from her letter, that Anne felt little affection for Henry, but had not been able to resist the temptation of a crown.

The royal counsellors seemed at first to have designed to dissolve the marriage, on the ground of a pre-contract between lord Percy and Anne; but this was denied by that nobleman. Harsher measures were then pursued. On May 12, Norris and others, accused of improper conduct with her, were arraigned, and found guilty. On May 15, the queen herself was tried before a number of peers, over whom her uncle, the duke of Norfolk, her open and bitter enemy, was appointed to preside. He had superintended all the proceedings against her, visiting her in the Tower, and telling her that Norris confessed his guilt,—a device well calculated to induce her to confess if really in fault. She had no one to plead

for her, and could only protest her innocence; but she was found guilty by a majority of the peers, on worse than doubtful evidence. The lord mayor, who was present at the trial, did not hesitate to say, that all he could gather from what passed, showed a determination to get rid of her. On the 17th, her brother, and the others accused as guilty parties, were executed. They declared their own innocence, and that of the queen, to the last, with the exception of Smeaton, a musician, who made some admissions, implying that he was guilty. He had been practised upon by a promise of pardon, if he would accuse the queen; but her enemies did not venture to bring him forward as a witness against her, and his execution was hastened to prevent his retracting. Anne Boleyn was beheaded on the 19th. Two days before her death, there seems to have been some intention to allow her to live; her own statement, admitting an engagement with lord Percy before her marriage with the king, was formally exhibited before Cranmer, who, in his judicial capacity, thought himself justified, by such a document, to pronounce her marriage void. But this gleam of mercy passed away; probably the king saw, that suffering her to live, might afterwards raise a question as to the validity of another marriage, which Henry, with brutal selfishness, had resolved to solemnize without delay.

Queen Anne before her death, became calm; she suffered with a steady firmness, which appears to have been founded on real religious feeling. She besought the favourable opinion of those present on the scaffold, but did not again protest her innocence; this appears to have arisen from a spirit of forgiveness towards her enemies, with a desire to avoid every thing which might excite the king's displeasure towards her infant daughter. Mortified pride, and inordinate affection for Jane Seymour, appear to have hurried Henry forward in putting his queen to death; but there is good reason to believe, that in addition to the falsehoods of lady Rochford and others, the efforts of the Romish party were exerted in various ways to hasten the catastrophe, and prevent time for reflection, which might have produced a different result. How uncertain is human grandeur! The 1st of May had seen Anne a queen, in the full enjoyment of rank and state; on the 19th she lay headless on the scaffold!

On the following morning the king married Jane Seymour. It is too plain that he did not wish Anne to be proved innocent of the allegations of her enemies!

The conduct of Henry, in this instance, increased the dislike towards him on the continent, especially among the Protestants. Melancthon and Bucer, who had been about to proceed to England, relinquished their journey, while both parties in England were awed into increasing submission by such arbitrary proceedings. The parliament assented to the king's mandates, that the princess Elizabeth should be set aside from the succession to the throne; and even passed a law, empowering Henry to declare his successor. Thus England was in the power of an autocrat; still there had been no suppression of public liberty. As yet, Englishmen, as a nation, had never possessed liberty as a nation. Hitherto the contest had been between the king and the nobility. The former now prevailed, but not without the aid of the people; the commonalty of England enjoyed greater privileges in this reign than in any other since the conquest; but as yet they were by no means freemen, nor were their rights duly regarded.

The dissolution of the monasteries was not accomplished without some risings among the populace, excited by the monks and the more ignorant of the priests, who felt that the progress of Scripture light exposed them to the loss of their customary influence. These insurrections prevailed mostly in the northern counties, where the monastic establishments had so engrossed the revenues of the benefices, that the greater part did not exceed four or five pounds per annum; they were consequently held by ignorant and needy persons. The archbishop of York declared that in his whole jurisdiction, there were not twelve priests able to preach. The first rising was in Lincolnshire, where Mackarel, prior of Barlings, availed himself of an unpopular tax, and induced the commons to rise, heading them himself under the name of Captain Cobler. They soon dispersed on the promise of pardon. In Yorkshire, there was a more formidable insurrection. The insurgents amounted to 30,000, commanded by Robert Aske. The body proceeded with some semblance of discipline, under banners displaying the wounds of Christ; they occupied York and other principal towns. The duke of Norfolk was sent against them, with ord-

ers to negotiate, till the king himself could bring up a larger force. He secretly favoured the cause of the insurgents, but succeeded in prevailing upon them to desire pardon, and the king to grant an amnesty. These insurrections were promoted by cardinal Pole. He was grandson of the duke of Clarence, who was put to death by order of his brother Edward iv., by his daughter Margaret, who married sir Richard Pole. From his early youth he was trained to learning, and highly favoured by Henry viii. This favour continued till the question of the divorce was agitated. Pole opposed the annulment of the marriage, which displeased the king, and excited suspicion; for in failure of the issue of Henry, the Poles were the next in succession to the throne. However, the king did not withdraw his favour from Pole, till the question respecting the supremacy also arose. Then, without any communication with Henry, he wrote a book in defence of the papal authority, which was completed in 1535. This work, written on the continent, while the author was subsisting on a liberal allowance from Henry, contained an abusive and slanderous attack upon the king, and Anne Boleyn, respecting whom he made statements wholly unsupported by any authorities, but which, although, resting on no foundation, have been studiously repeated by modern Romish historians. They refer to Pole's scandalous and false slanders as valid authority, forgetting the vast mass of documentary evidence, still existing, the silence of which is a sufficient proof that his assertions were false. The cause of his malignity is evident. Queen Catherine had contemplated a union between him and the princess Mary, whose affections Pole had engaged; this, and his being himself of the royal blood, gave him a prospect of the throne, which was done away by the marriage with queen Anne; his only chance of gratifying his ambition was the removal of Henry himself.

While Pole entertained these hopes, he was unwilling to take orders, which would prevent his marrying the princess, but the emperor did not wish to see Pole a temporal prince. The pope, therefore, was induced to require him to be made a priest, and created him a cardinal. Pole very unwillingly consented to receive an honour he could not refuse. However, he was obliged to comply, and thus was made, according to the doctrines of

Romanism, one of the successors of the apostles! In his book, he had just declared the dignity of the priesthood, asserting that kings were in all things inferior to them, and that he had doubted whether they should be called ambassadors from the people to God, or from God to the people; he blasphemously added, "I doubt whether I ought not to call them gods themselves!" He was now fairly caught in his own trap, and no way of retreat was left; he was committed to the contest against his king and benefactor, and ever after showed the deepest personal rancour towards him. The first duties imposed on the cardinal were to take his station in Flanders, and from thence to communicate with the popish malcontents in England. His business was, as his own biographer states, "to excite the Catholics in England." Henry offered a reward for the apprehension of this rebel; for although the insurrections had mostly been put down before Pole arrived at his appointed station, he exerted himself to fulfil his commission, urging the pope to publish the full denunciations against the king of England; but Paul's policy kept him as yet from extravagant proceedings, which would only compromise his own authority.

The hopes excited in the minds of the papists by the fall and death of queen Anne, were shown in other proceedings, besides these insurrections. They were not only alarmed at the removal and destruction of superstitions, the progress of truth was still more threatening. Tindal's translation of the New Testament has already been noticed; considerable numbers of this invaluable book were brought secretly into England, and sold privately among the people. And now, the advantages resulting from the previous labours of the Lollards were very evident. The Reformation was not in England, as in some other countries, an effort chiefly confined to the learned and higher or middle ranks. The people had, in many districts, long known scriptural truths. They prized the humble, written copies of Wickliff's translation, many of which are still found in our public libraries, showing by their contrast to the more elaborate and ornamented manuscripts upon other subjects, that they were written for the people, and adapted for their wants. By the mass of the people, the printed Testaments of Tindal were eagerly received.

They were cheaper than written copies; their price was within the means of the working classes; they were more easily read and understood, as a friar, who sold them secretly, is recorded to have told some Essex labourers, they were "clener Englyshe." They were prized by thousands, even apprentices possessed themselves of the words of their Saviour, and concealed the book in their bedding to read in secret.

Encouraged by this desire to possess the Scriptures, and patronized by Cranmer and the queen, the translators of the Bible proceeded with their work. The first complete translation was made by Miles Coverdale, probably with the assistance of others. This was dedicated to queen Anne, but only a few copies had been issued, when she was beheaded. Another dedication to queen Jane was substituted. Meanwhile Tindal proceeded with his translation, but having been entrapped by the officers of the emperor, he was put to death in Flanders, in 1536, his last words being a prayer, "Lord, open the king of England's eyes." His translation was revised, and finished under the direction of Cranmer.

Immediately upon the death of Anne, the papists made an effort in the convocation, or parliament of the clergy, to stop the translation of the Scriptures into English, and to stay the progress of the Reformation. But the king's counsels were influenced by Cromwell and Cranmer, and he himself saw the necessity of separating from the pope. The convocation were directed to proceed to reform the rites and ceremonies of the church, taking the Bible for their guide. Four of the Romish sacraments were abolished, parts of the public service were ordered to be in English, and English Bibles were to be set up in churches. Thus the great question of admitting scriptural truth was settled, and before its light the darkness of superstition and ignorance must always recede. But much remained to be done. The works then set forth by authority for instruction, are by no means free from papal error. The proceedings of the prelates at this period, including those of Cranmer, show that the movement was greater among the people than among their rulers. It is important to refer to this as an ascertained fact, since this alone is enough to disprove one of the assertions of modern Romanists, and their abettors, too easily

acceded to by nominal Protestants, namely, that the Reformation in England was a political work—it was not so. The king's own mind was but partially enlightened; he clung to many of the most deadly errors of popery, but he found his political measures strengthened by listening to the public voice; though for a time it appeared undecided which party would prevail. That Henry really desired to benefit his subjects, whenever his own unbridled will did not interfere, appears from his readiness in granting the request made about this time by the leading men of Wales, that the English laws and privileges might be extended to them. This was the way firmly to unite the two countries.

In 1537, there were more troubles in the northern counties, and greater severity was shown in their suppression. On October the 12th, in this year, the king was gratified by the birth of a son, afterwards Edward VI., but the national grief was excited by the death of the queen a few days afterwards. To speak in ordinary terms, this was an untoward event, and was the cause of those subsequent difficulties respecting the king's wives which have been often used against him. Queen Jane was lamented; her untimely death was a rebuke upon the haste with which she had consented to occupy the station of another. Yet these hasty nuptials had been productive of good, by preventing Henry from making terms with the pope, who offered to make up the breach as soon as he heard of the death of Anne. This union also gave the nation a Protestant king, whose reign, though short, did much to establish the English Reformation. Henry desired to repair his loss without delay. The emperor recommended to his notice the duchess of Milan; but she is said to have declined the honour, stating she had but one head, if she had two, one should be at his majesty's service! A just reproof for his cruelty to queen Anne; but it is said the duchess was herself a light character, therefore, perhaps was conscious that she would be in danger.

Meanwhile the Reformation went forward. A new translation of the Bible was put in hand, many books were circulated containing scriptural truth; while others, advocating popish error, and attacking the king in gross and treasonable language, were also published. Henry endeavoured to enforce unifor-

mity of views, though in vain. This was remarkably shown in 1538, when a poor but learned schoolmaster, named Lambert, was brought forward publicly in Westminster Hall, to plead before the king and his bishops, against the Romish doctrine of transubstantiation. It was a painful sight to see this pious man beset by such powerful adversaries; the Romish bishops argued against him in cruel and bigoted terms; the prelates inclined to Reformation pursued a milder course, but still supported this gross and fatal error respecting the sacrament. The king delighted in showing his scholastic attainments; he did not hesitate to gratify this puerile vanity at the expense of the victim before him. At length, the faithful confessor, wearied with the debate, which continued five hours, was silenced by the abuse heaped upon him. He commended his soul to God, and threw himself upon the king's mercy. Henry declared he would not patronize heretics, and ordered sentence to be pronounced against him. Lambert was shortly after burned in Smithfield, with circumstances of great cruelty; but under unspeakable agonies he was enabled to exclaim, "None but Christ, none but Christ!" Others suffered in the same cause, clearly showing that there were many among the people far more enlightened than their rulers and teachers. That the contest, so far as Henry was concerned, was rather for temporal than spiritual matters, was shown by the burning of friar Forest, about the same time, for denying the king's supremacy. A celebrated Welsh idol formed part of the pile which consumed him. It would be wrong to excuse or palliate these arbitrary and sanguinary proceedings; but it is equally wrong to attempt to conceal, that Henry was driven to many of these measures, by the unceasing attempts of the papists. Pole's residence in Flanders has been mentioned. He instigated the later insurrections; and in November, 1538, several of his relatives in England were attainted and executed on the charge of being concerned in a treasonable plot. His aged mother, the last of the direct line of Plantagenet, was implicated, but her life was spared. She remained a prisoner till May, 1541, when the king, irritated by new devices of cardinal Pole, caused her to be beheaded; a useless act of cruelty, which is justly noted as a stigma upon his memory.

Henry was bent on forcing his subjects

to uniformity of opinion on religious subjects, but had no intention that they should be again subject to the pope; yet under the influence of Norfolk, and Gardiner, the bishop of Winchester, he was induced to support the worst errors of Rome, by causing the parliament, in July, 1539, to enact the act of six articles, which commanded all to believe in transubstantiation, restricted the communion to the administration of bread, forbade the marriage of priests, countenanced vows and private masses, and confirmed confession to priests. All who opposed these dogmas were liable to suffer death. Cranmer openly resisted the enactment of this iniquitous law in parliament; the king respected his honest boldness, though at one time he ordered him to cease his opposition, and withdraw.

The papists rejoiced at carrying this measure; it induced them more easily to allow the final proceedings for the dissolution of monasteries. Six hundred and forty-five of these establishments, with other foundations, having a yearly revenue stated at 161,000*l.*, possessing a large property in goods and valuables, were now suppressed. Had these acquisitions been rightly administered, the crown would have been supplied with a considerable revenue, while many useful measures might have been instituted. Cranmer exerted himself to procure this result, but the grasping characters about the king prevailed. The property thus acquired was speedily dissipated. The nobles and gentry of the court mostly supported these proceedings, hoping to obtain a share of the plunder; and the large possessions now enjoyed by several of the principal nobility of our land, were then assigned to their ancestors for paltry considerations, or as gifts, and recompenses for trivial and even disgraceful services. Yet the dissolution of the monasteries, and the subsequent division of property, was a measure beneficial to the nation; it was absolutely needed to give scope for that spirit of commerce and enterprize required to meet the altered circumstances of the age, when the nominal value of every commodity, was materially affected by the influx of gold and silver from the New World. It must be remembered, that the power of the crown would have been still farther increased by the retaining all these possessions, which would have rendered the king wholly independent of the people. One feature in the alteration of property

was much to be regretted, the appropriating to laymen the ecclesiastical revenues of a parish. Thus all the disadvantages attending the usual method of raising money for ecclesiastical purposes were continued, and even increased, without any public services being returned in consequence. Even at the time, ignorance was rendered more inveterate, for instead of a pastor, in some degree partaking of the increasing learning of that day, a superannuated destitute monk was often retained as parish minister, whose services could be had for his mere living.

The parliament at this time gave unlimited consent to the king's mandates, even declaring that the royal proclamations should have the force of laws. Henry had balanced the two great parties, which divided the nation, and thus established his prerogative beyond control. After forwarding the designs of those attached to the Romish faith, he granted the desires of the Protestants, by sanctioning the English Scriptures. The Bible was now set forth by authority. Cranmer's earnest desire was fulfilled: when he first took a completed copy into his hand, he wrote to Cromwell, that in furthering this work he had done him more pleasure, than if he had given him a thousand pounds; and that he doubted not, but that thereby such fruit of good knowledge should ensue, that it would well appear hereafter what high and excellent service Cromwell had done unto God and the king. The pleasure with which the people received this inestimable gift is thus described by Strype: "It was wonderful to see with what joy this book of God was received, not only among the more learned sort, and those that were noted for lovers of the Reformation, but generally all England over, among all the vulgar and common people; and with what greediness God's word was read, and what resort to places where the reading of it was. Every body that could, bought the book and busily read it, or got others to read it to them, if they could not themselves, and divers more elderly people learned to read on purpose. And even little boys flocked among the rest to hear portions of the holy Scripture read. Cromwell, as the king's vicegerent in religious affairs, ordered the prelates and clergy to recommend the study of the Scriptures.

The elevation of Cromwell was not less extraordinary than that of his old master Wolsey. He was recognized by

parliament as next in rank after the royal family ; but he felt the instability of his situation ; he sought to strengthen and support it by measures which in effect caused his downfall. The king had been a widower two years, when, by Cromwell's means, he was induced to marry a Protestant princess, Anne, daughter to the duke of Cleves. Deceived by a report of her beauty, Henry consented to the union, and hastened to Rochester to meet her. The first sight convinced him that he had been grossly deceived ; he was, as a bystander described him, "marvellously astonished and abashed," and gave utterance to his thoughts in plain language. But the matter had gone too far for him to recede ; he unwillingly received her as his wife, but after a few months, he reproached Cromwell with having formed the alliance, and required him to devise some plan for effecting a separation. Other matters hastened the downfall of the minister. The king's affections were entangled by the beautiful Catherine Howard, a niece of the bigoted duke of Norfolk.

On June 10, 1540, Cromwell, just elevated to the peerage, first took his seat in the house of peers, as earl of Essex, and seemed in the full possession of his dignities ; in the evening he was arrested by the duke of Norfolk at the council-board, on a charge of treason ! Amidst the busy and changing political affairs of that day, both at home and abroad, it was not difficult to put together some plausible, but weak allegations against him. He was not allowed a trial ; a bill or act was passed by parliament, declaring his treasons, and ordering his death. All his summer friends forsook him ; Cranmer alone ventured to stand as his defender, but in vain : after some little delay, the law was passed, and he was beheaded on Tower-hill, on July 28. It should be observed, that Cromwell himself had just introduced the plan of sentencing to death without trial, by a bill of attainder, having thus procured the conviction of the aged countess of Salisbury. His own condemnation, by the same wresting of the law, speedily followed, and his death preceded hers ! Cromwell was a remarkable instrument in effecting the changes of those times ; but, though a steady supporter of the Reformation, he acted on political rather than on religious grounds. Like many others, the gross absurdities of popery,

which in early life he witnessed at Rome and elsewhere, induced him to throw off its bondage ; but he did not submit himself to that Master whose "yoke is easy, and whose burden is light." He sought worldly honours, and obtained them : twelve years saw both the extent of his upward course, and his precipitous fall from the summit of earthly greatness. Romanists have represented him as returning to popery previously to his death ; but his last prayer has been preserved : it fully refutes this assertion, showing that when his last hour drew nigh, he sought for mercy where alone it is to be found. Whether it was then too late, is not for us to attempt to judge ; we know who has declared, "Him that cometh unto me I will in no wise cast out."

The annulment of the marriage with Anne of Cleves, took place in the same month, on the plea of a previous engagement between her and one of the princes of Lorraine. She readily consented to give up being queen of one whose affection she had never possessed. A liberal pension was settled upon her ; she resided in private at Richmond, till her death in 1557, doubtless enjoying much more worldly happiness, than if she had continued queen of England.

The king lost no time in marrying Catherine Howard, who was publicly acknowledged as queen on August 8. This was an unhappy union ; its commencement was marked by a scene of bloody persecution.

Barnes, Garret, and Hierome, three divines who were followers of the truth, were burned at Smithfield, on July 30. They were condemned for maintaining the great scriptural doctrine of justification by faith. The contest between papists and their opponents is not often brought to this issue. In general they proceed upon some of the less open, but more direct dogmas of their church. It was now evident, that, as Latimer stated, if the great apostle of the Gentiles had preached the doctrines recorded in his epistle to the Galatians, at the Cross in London, called by his name, he would have been liable to condemnation as a heretic ; for the accusations against Hierome were expressly founded on a sermon preached at Paul's Cross, from the allegory of Hagar and Sarah, contained in that epistle, wherein he taught that justification was the gift of God, not obtained by baptism, or penance.

With these Protestants, three martyrs for the cause of the pope were brought to execution; they were placed in pairs, a Protestant and a Papist on the same hurdle: but the condemnation of Abel, Fetherstone, and Powel, was for denying the king's supremacy. They suffered the death of traitors, indicating a different class of crime. No Romanists suffered in the reign of Henry for religious doctrines. They were condemned for acts which threatened the earthly power of the monarch; they were martyrs for the pope, not for Christ. The Romanists then reigned without control; hundreds, even of substantial citizens in London alone, were imprisoned and charged with heresy. The number was too great to admit of full proceedings against them; but Bonner, the bishop of London, went as far as he dared to venture. Latimer resigned the bishopric of Worcester, and Shaxton that of Salisbury, in consequence of the passing of the law of the six articles. Cranmer sent his wife to her friends in Germany; while others of the reformers retired to the continent, or, like Becon, went into parts of England where they were unknown.

In 1541, the kingdom was disturbed by a rising in Yorkshire, which was soon put down. This was followed by a royal progress towards the north, where it had been arranged, that James v., king of Scotland, should meet Henry. The latter was desirous to urge his brother-in-law to measures similar to his own respecting the papacy. Cardinal Beatoun, the prime minister of James, was aware of the danger, and persuaded his monarch to disappoint the English king, which led to hostile proceedings in the following year. While Henry was absent on this tour, and speaking in the highest terms of his new queen, a private communication was made to Cranmer, charging the queen with guilty and licentious conduct before her marriage, naming various persons, particularly one who had been lately engaged by her as an attendant. Cranmer trembled, and would gladly have refused to take up the matter; but as there was no reason to doubt the truth of the information, concealment must involve him in the consequences. He consulted the chancellor, and on Henry's return put into his hands a packet stating the particulars, leaving it to the king to proceed as he thought advisable. Henry would not believe the charges, but directed a private inquiry. The result

proved the misconduct of Catherine Howard. The guilty parties confessed the charges. Among them was included lady Rochford, who had been instrumental in procuring the death of her husband and sister-in-law, Anne Boleyn. She was now convicted, on indisputable evidence, of having personally aided the queen to have secret interviews with her paramours. The parties being clearly proved guilty, were executed; but the queen was spared for two months, till February 13, 1542. Henry did not easily overcome his regard for her; and his affections were not then placed upon any other individual, so as to make him eager for her removal.

The Romanists have been loud in condemning Anne Boleyn, whose guilt never was satisfactorily proved; they are as silent as possible upon the infamous conduct of Catherine Howard, which was clearly proved, and confessed by herself and lady Rochford, and other parties. The detection of her guilt was favourable to the Protestants, as it weakened the influence of Norfolk and his partizans over the king, which otherwise, probably, would have proved fatal to Cranmer and his coadjutors in the Reformation, had this queen retained her influence over the royal mind. But we cannot excuse the conduct of Henry in thus putting Catherine Howard to death. "He that is without sin among you, let him first cast a stone at her," were our Lord's words to the Pharisees in a somewhat similar case. Henry must have been, like them, self-convicted, if he reflected upon his proceedings.

In the year 1541, Henry assumed the title of king of Ireland. The English monarchs hitherto had only been styled "Lords of Ireland."

The following year was distinguished by a short war with Scotland. James v. was a vicious and cowardly character. His army fled at Solway before a few English horsemen; the disgrace so affected him, that he died after a short illness, leaving only one child, Mary, then but eight days old. Henry instantly planned her marriage with his infant son. This politic arrangement was opposed by cardinal Beatoun, who obtained the regency by a forged will of the late monarch. In the following year this matter was fully discussed, when the French interest prevailed. The English ambassador was insulted, and compelled to leave Edinburgh. Henry resented

the French interference by assisting the emperor with a body of forces. These three rival powers were as much enemies to each other, as they had been twenty-five years before. Advancing age found the monarchs as much opposed as they had been in former times.

The principal events in England, at this time, relate to the state of religion. The king's council was still divided; each party seemed alternately to prevail, as the king gave them countenance. The chief question at this time was the circulation of the English Bible; for this Cranmer contended earnestly against Gardiner and his party: with the king's aid the former prevailed; this blessed boon was secured to the people; the last effort of Gardiner and his colleagues to render it useless to the people at large, by retaining a number of Latin words, was unsuccessful. Gardiner, however, procured the royal authority for a work called, "A necessary Instruction for a Christian Man," which in flattery he entitled, "The king's book," but which abounded in popish errors, even more than a volume set forth by Cranmer some years previously, known by the name of the "Bishop's book."

Henry was now affected by infirmities, arising from his indulgence in the pleasures of the table, as well as from advancing years; yet he formed a new marriage with Catherine Parr, the widow of lord Latymer, a middle-aged woman, of learning and ability, well inclined to the Reformation. The king now required a nurse rather than a wife. Catherine Parr tended him with much care, and by observance of his will, though his irritability greatly increased, she defeated the plots of her enemies. At one time the wily Gardiner persuaded the king to suspect her able arguments upon theological subjects, and to have her examined on a charge of heresy. Being apprized of her danger, she declined arguing farther on these subjects; the king was reconciled, and severely rebuked his popish counsellors when they attempted to proceed against her. This event probably occurred in 1544. Her printed Meditations and Prayers contain many precious statements of gospel truth.

Cranmer was attacked in like manner, but the king protected him. He sent for the archbishop at night, and warned him that he had been induced to consent to his being called before the council, that he might be committed to the Tower on

a charge of heresy. Cranmer thanked the king, expressing his readiness to submit to investigation. Henry exclaimed at his simplicity, and willingness to give his enemies such an advantage, as false witnesses would speedily arise if he once appeared in disgrace. He gave a ring to the archbishop, telling him to produce it, and to claim the royal interposition when he found his brother counsellors about to proceed unfairly. The next morning, Cranmer was shut out from the council, and made to wait at the door among the servants. Henry was informed of this by Dr. Butts, his physician; the matter proceeded as had been planned; the king by his interference subdued the enemies of Cranmer, and rebuked them in severe terms.

On another occasion, Henry gave Cranmer information of devices against him, insisting upon an investigation, which covered the archbishop's enemies with shame. The preservation of Cranmer through the stormy party proceedings of Henry's later years, clearly shows the special interference of Providence, and exhibits a good trait in the character of the monarch. Wearied and harassed as he was, by the bad principles and conduct of many around him, they were left by him to exhibit the awful effects of unsubdued passions, in their contests with each other, while Cranmer, being governed by Christian spirit and principle, his enemies were not suffered to triumph over him. It would be difficult to point out any character concerned in political proceedings for so long a period as Cranmer, who acted so thoroughly upon gospel principles. His object evidently was to discharge his duties correctly, according to the evidence laid before him. He never exhibited any personal rancour, and the gospel principle of forgiveness of injuries he carried so far, that it was commonly said, "Do unto my lord of Canterbury an ill turn, and you make him your firm and constant friend!" How widely different was he from Beaufort, Wolsey, Gardiner, and Pole! All these arrogated to themselves the title of successors to the apostles, while they were actuated by worldly views and the worst of passions.

At this period the crafty Gardiner was the most active among the persecuting prelates. Bonner was more cruel and brutal, but was an instrument rather than a leader of his party. Several were persecuted as heretics about this time;

among them was Marbeck, the first compiler of an English concordance. He was condemned as an offender under the law of the six articles, but was one of the few to whom mercy was extended. Gardiner, however, by these proceedings, weakened his influence over the king.

The succession to the throne was regulated by parliament in 1544. It was first to devolve upon Prince Edward; and, in default of his descendants, to pass in succession to his sisters Mary and Elizabeth.

The warfare with France and Scotland required an expenditure which could only be met by taxes and forced loans. The latter were rigorously exacted. A striking instance of the tyranny with which these were enforced, was shown in the case of a citizen named Richard Reed, an alderman of London. We give it in the language of the instruction sent to the commander under whom he was placed. It states that, "Notwithstanding such necessary persuasions and declarations, as for the purpose were at great length showed unto him, and the consent also, and the conformity thereunto of all his company, he stood alone in the refusal of the same, not only himself, upon a disobedient stomach, but thereby also giving example, as much as in one man might, to breed a like deformity in a great many of the rest. And forasmuch as for the defence of the realm and himself, and for the continuance of his quiet life, he could not find in his heart to disburse a little quantity of his substance, his majesty hath thought it much reason to cause him to do some service for his country with his body, whereby he might somewhat be instructed of the difference between the sitting quietly in his house, and the travail and danger which others daily sustain, from which he hath hitherto been maintained in the same. For this purpose his grace hath thought good to send him unto your school, as you shall perceive by such letters as he shall deliver unto you; there to serve as a soldier, both he and his men, at his own charge; requiring not only as you shall have occasion to send forth to any place for the doing of any enterprize upon the enemy, to cause him to ride forth to the same, and to do in all things as other soldiers are appointed to do without respect; but also to bestow him in such a place in garrison, as he may feel what pains other poor soldiers abide abroad in the king's service, and know the smart of his folly and disobedience. Finally, you must

use him in all things after the sharp military discipline of the northern wars." Upon such a proceeding no comment need be made. It shows how little protection any subject then enjoyed. We find that Reed was afterwards taken prisoner. The king then had pity on him, and desired, "that if there may be any good means devised for his redeeming, your lordship shall take such good order for getting of him again as you shall think most convenient."

As usual, the sufferings of the war fell chiefly on the peaceable inhabitants near the borders, which were devastated, while the Scots remarked upon the impolicy of such a way of courting a marriage with their infant queen. On the continent the emperor and Henry, as usual, sought their own respective interests, which prevented an efficient campaign against France. Henry secured Boulogne, while the emperor made a separate peace with Francis. The war between England and France was continued the following year, chiefly by combats at sea, and descents upon the coasts of both nations. To meet these expenses, the parliament gave Henry power to seize the revenues of all colleges and hospitals. It is evident that while his covetousness urged him to take the revenues of many public establishments, his love for literature, and the influence of Catherine Parr, preserved the universities and other public foundations, rather than the measures of his parliament and council.

Peace with France, and afterwards with Scotland, left the king at liberty to direct his attention to home concerns, especially the state of religion. The proceedings in Scotland relative to the Reformation claim attention. Cardinal Beaton was assassinated in 1545 by his political opponents, whom he had persecuted on account of religion. In Scotland the popish ecclesiastics had proceeded to such gross acts of depravity and persecution, that the conflict was fierce when it once began. The papists had effected a union with France against the true interests of their land, to support their power; it was clear that a political contest must be the result.

In England, Henry again tried to bring each party to his own peculiar views. He allowed the papists to enforce the act of the six articles. They succeeded in bringing a lady of rank and family, Ann Askew, to the stake; but, as already stated, failed

in their attack upon the queen. The examinations of this lady, who was burned for denying transubstantiation, show her courage and firmness. She was put on the rack to extort accusations against others. Wriothesly, the lord chancellor, himself put his whole force to the instrument of torture, when the lieutenant of the Tower directed the executioners not to treat her with severity.

The papists could not succeed in preventing the reading of the Scriptures in English, but, by a preposterous enactment, all persons under the degree of a gentleman, and all females, were forbidden to study the word of God. Such laws could not be executed. On the other hand, many superstitious services were done away, and part of the public prayers ordered to be recited in English; an important advantage to those who desired reformation. The efforts of Cranmer during the latter part of this reign were less directed to political measures, than to confirming the progress of the Reformation, by giving solid instruction to the people, and encouraging the preaching of the gospel. He had much opposition from the clergy, but the records of his visitations show that he proceeded with firmness and discretion.

The inconsistent proceeding of Henry, to restrict the use of the English Bible, after he had so expressly encouraged it, doubtless proceeded from the influence of the Romanists, though he was then at variance with the pope. The church and clergy of antichrist, in all its forms, especially that of Rome, ever has opposed the free circulation of the Scriptures. At present many advocates of the church of Rome attempt to disguise this, stating that several translations of the Bible into German, French, and Italian had appeared before any Protestant versions. This is not denied; but it is still more plainly manifest, from indisputable records of history, that as soon as the supremacy of the pope was disputed, as soon as his authority to interpret Scripture was denied, and the addition of human traditions was objected to, from that time the versions in the modern languages were restricted and suppressed. Where a version in a vernacular tongue exists, there will be a general desire to study Scripture; ecclesiastical domination in every form is opposed to this: and wherever there is the determination to rule over the consciences of men, there the simple study of the Scriptures will

be objected to. We see this fully exemplified in our own day; but in the early times of the Reformation it was aimed at without any attempt at disguise.

The duke of Suffolk died in 1545; he was the king's brother-in-law, and maintained a beneficial influence over him in many cases. After his death, Henry said of him, that he had never attempted to injure any one, or to whisper away their characters; adding, "Which of you, my lords, can say the like?" Self-accused, like the Pharisees of old, they shrunk under the rebuke! The removal of this prudent counsellor, and the equal division of the ruling parties at court, with the king's increasing infirmities, gave an opportunity for the display of his capricious temper. He was so infirm from disease and corpulency, that he could only be moved from place to place in a chair, while noisome ulcers in his legs defied the skill of his physicians.

The nobles were active against each other. The Seymours, whose head was the earl of Hertford, strove to procure the ruin of the Norfolk family; the earl being maternal uncle to prince Edward, was desirous to remove those who might dispute his power when a new reign should commence. He availed himself of Henry's jealousy against the ancient nobility, who had in former reigns so often exercised authority over the kings themselves. The earl of Surrey was condemned under frivolous pretexts, chiefly supported by his having included the royal armorial bearings with his own. Thus perished one of the most learned and accomplished of the nobility. His father, the duke of Norfolk, was also accused of treason, but nothing could be proved against him; though we find his wife and daughter giving evidence against the husband and son! By the promise of pardon, Norfolk was induced to sign a sort of confession, on which an act of attainder was brought into parliament, and hurried forward. He was ordered to be executed. January 27th, 1547, found him expecting death on the morrow, but this fate was averted. A fate which, be it remembered, he had inflicted upon many during the long period he had assisted in guiding the king's counsels. He had presided in parliament, where he repeatedly urged forward bills of attainder, like that which so nearly sent him to the scaffold.

The king's danger had long been known to his personal attendants, but

the courtiers refrained from telling him that death was at hand. A recent law had brought such a proceeding within the limits of treason, as an imagining the death of the king. Sir Anthony Denny alone was honest and courageous enough to tell Henry that it was necessary to prepare for his last hour, then rapidly approaching, and counselled him to call for mercy.

The king received the fatal news with composure, and thanked his faithful attendant; he expressed sorrow for his past sins, with reliance on the mercies of Christ alone. Being asked if he wished to see any of the clergy, he desired Cranmer to be summoned. The archbishop was then at Croydon. He hastened to the palace, but found the king speechless. Cranmer desired him to give some sign whether he died trusting in the faith of Christ. He pressed the archbishop's hand, and shortly after expired. Luther had departed to his rest the year preceding. Charles v. survived about ten years afterwards, having abdicated his throne some time previous to his death. Francis I. died two months after Henry; the pope Paul III. followed him to the tomb in less than two years. Thus rapidly did the great actors, in the busy times we have noticed, pass from the scene of action.

We have no desire to excuse the faults of Henry VIII., or to extenuate his crimes; but, on the other hand, it is not right to exaggerate them in malice. The facts of his history show, that many of his predecessors were far more blameable in their conduct, and their vices more flagrant. It cannot be concealed, that the chief cause of the obloquy heaped upon him, has arisen from his quarrel with the pope, and his promoting the Reformation. Even before his fame was stained by the death of Anne Boleyn, and the merciless executions which followed, cardinal Pole, whose scurrilous libel has been unhesitatingly quoted as authority by Romish historians, represented him as the most infamous of monarchs, who had reigned for nothing but evil; while in the same book, the same writer does not hesitate to say, that he might yet become a plant of God, and bring forth excellent fruit, "if"——— what?—(as Turner well expresses it,) "if he would but reinstate the papal supremacy." This was the commencement of Henry's evil deeds in the eyes of popish writers; we may say with truth,

it gave rise to the worst actions of his life. From that moment he was beset with enemies, his life was aimed at, his fame was openly attacked. He resisted, and inflicted severities which, though justified by the form of legal proceedings, were evidently tyrannical, and involved considerable injustice. We do not make light of evil when we say, that these actions proceeded mainly from the temper and manners of the age; but it would have been well for the memory of Henry, had he followed the counsel of Francis, and had not allowed the law to be urged to such extreme proceedings against his enemies.

Yet amidst all these severities, it must be remembered that Henry VIII. was popular with the great mass of his subjects. This should not be kept out of sight, for no thoroughly tyrannical monarch ever enjoyed popularity to the end of his career. Like the kings of Judah, Joash and Amaziah, when monarchs have become thorough tyrants, they have usually fallen victims to conspiracies.

Henry VIII. was a lover of worldly and sinful pleasures; and owing to the manners of that day, his vices were often very offensive and public: but it is also true, that other English monarchs, both before and after his days, have been deeper offenders than himself. He was a lover of pleasure more than a lover of God, but he was not atheistical in either his principles or his conduct. Though he paid some respect to the faithful admonitions and bold reproofs of the Protestant reformers, it is to be lamented that he did not reform the grossness of morals, if not occasioned, yet encouraged by popery, which is most hurtful to the female mind, and therefore highly prejudicial to the welfare of society, and the best interests of our race. Had he been such a tyrant as some have represented, would Latimer have been favoured? would he even have been suffered to escape, after his presenting to the king a New Testament in English, doubled down at the passage, "Whoremongers and adulterers God will judge?"

There are many traits of character recorded of Henry, which show him to have been, as a foreigner wrote in 1519, "affable and benign, and not offending any one." There was that sort of good nature about him when not irritated, which makes those of middle life popular, much more so those of high rank.

His heartless and cruel conduct to his

wives, has justly rendered Henry an object of dislike; but even in this case the truth should be told. Naturally he desired domestic enjoyment, which caused him to seek happiness in marriage; not a usual proceeding in those of kingly rank, and certainly not in his contemporaries. Turner notices that, "Of his six wives, the first and the last did him credit, and made him happy, and were respected by him; the third died beloved and lamented; the second left her honour questionable; and the fifth indisputably disgraced herself. It was the fourth only that could justly say, she was repudiated without any fault." We defend not the selfish desire for self-gratification, which had some influence upon his conduct in seeking the divorce from Catherine, but certainly it originated in the devices of others, and was brought to its termination by political proceedings. If the passions of Henry had some bearing upon this event, it is equally clear, that the passions of others had still more to do with the matter.

Having thus spoken of Henry VIII. without any desire to palliate or excuse the vices which brought awful guilt upon him, we must, in conclusion, again notice him as an instrument, in the hand of God, for effecting a most important purpose. Bishop Burnet well observes, "While we see the folly and weakness of man, in all Henry's personal failings, which were very many and very enormous, we at the same time see the justice, the wisdom, and the goodness of God, in making him, who was once the pride and glory of popery, become its scourge and destruction." After urging the value of pure Christianity, he adds, "May we ever value this as we ought. And may we, in our temper and lives, so express the beauty of this holy religion, that it may ever shine among us, and may shine out from us, to all round about us, and then we may hope, that God will preserve it to us, and to our posterity after us, for ever."

CELLS OF THE HONEY BEE.—No. II.

SEVERAL peculiarities in the structure of the bees' cells yet remain to be noticed. It has been recently discovered, that the walls of each cell are all double, or rather that each is perfect and complete in itself; and as they are so accurately adjusted, and so perfectly united to each other, that it is difficult to distinguish the separate form of each

cell taken by itself, it follows that additional strength will be gained by this method: probably it may be advantageous in some other respects.

It has also been found, that the cells are formed of two different sizes, according as they are designed for the males or drones, and the workers or neutrals. A certain relative proportion between them has been found to be uniformly and unvaryingly kept. The cells of the drones are larger than those intended for the workers, in the proportion of two six-fifteenths to three five-fifteenths, or as 2,4 to 3,333.

We stated in our first paper, that there were only two other figures beside the hexagon that would admit of being placed together in the same manner, without some loss of space. We omitted to state, that one of these, namely, the triangle, is made use of by the bees. We stated before, that the bottom of each cell was formed of three lozenge-shaped planes, meeting in the centre, so as to form a triangular base; or nearly the outline of the figure known by geometers as the tetraedron, but flatter. This form of the base of the cells on one side, naturally produces the same arrangement on the other; which could not have been the case, if any other form had been adopted, so as to fulfil, at the same time, the other conditions of the problem. If, for instance, the cells were all made hemispherical on one side, this would produce a very differently shaped base to the cells on the other side. Again, if the walls of the cell had been carried on at a certain angle till they met in a point, forming an hexagonal pyramid, this would not have admitted of close approximation; it would have been more complex, and more expensive, as it would take a greater quantity of material, and cause the opposite cells to have differently shaped bases. This form then which they have chosen, we see to be not only the most perfect, but the only form which could be adopted to satisfy the conditions of the question. Here we may justly pause to admire the workmanship of this little insect. If a human artist were required to construct a similar fabric, we should find him making use of the most perfect instruments of various kinds, and assisting his imperfect vision with glasses, aided by a strong light, and all the helps that ingenuity could contrive. But this hum-

ble labourer works in the dark. Bees do not like the light, at least in their hives, and carefully close every aperture and crevice by which light may enter. Their sight is supposed to be less perfect than that of most insects; and their careful exclusion of the light would seem to countenance this supposition. Yet, though it labours in the dark, the mathematical correctness, the beauty, the strength, the lightness, and the admirable finish of the work, excite our astonishment, and present a remarkable contrast to the best specimens of human ingenuity, which never fail to appear clumsy and imperfect, when compared with the works of nature.

The temperature of a hive containing a large number of bees, and from which the external air is so carefully excluded, if not by man, by the bees themselves, sometimes in warm weather rises very high; on such occasions they may be seen depending in a large cluster from the mouth of the hive. A curious circumstance may be mentioned here relative to this increase of heat. If a jar of honey be kept at the ordinary temperature of a full hive in warm weather, it will ferment and soon spoil. Now, why does not the honey in the hive, which is sometimes exposed to this heat for days together, ferment in like manner? How is this difficulty provided against? Simply thus: the honey in the hive is distributed into a great number of cells, instead of being put together in a mass. There is no larger quantity than one cell can contain together, and when the cells are full, each one is carefully closed from the influence of the external air by a lid or cover of wax. The quantity of honey thus inclosed, is too small to run through the same chemical changes as a mass at the same temperature.

But it is time to mention a few facts relative to the habits and natural history of the bee. It is well known that they are divided into three classes, males, females, and neuters. The queen is the only female in the hive, and she is known to produce from 15,000 to 20,000 eggs in one season. The drones are the males, which are comparatively few in number; the neuters, or workers, are by far the most numerous and industrious. Upon them the labour of building the combs and storing them with honey falls. The way is ascertained to be a secretion

from the bodies of the working bees, as they are known to build combs when inclosed in a hive, and fed only upon sugar and water. They often fly a great distance from home; and are known to go as far as five miles, and even seven, for their supplies. This has been ascertained by dusting the bees with flour, or otherwise colouring them as they leave the hive; they have been thus identified, and the fact placed beyond doubt; and yet the bee is supposed not to be able to see directly more than the distance of a foot before its eyes.

Bees will often return to the same flower several times, apparently unconscious of having visited it before. This any one who has opportunity may observe them do, sometimes as often as twice or thrice in a minute. They seem to have but little sense of hearing, as the loudest shouting, even through a speaking trumpet, does not apparently disturb them. A most remarkable circumstance relative to the manner by which the bees, when deprived of their queen, by accident or otherwise, obtain another, is considered as satisfactorily established by the most recent and respectable writers on this subject, and with which we shall conclude the present article. We are not aware of any parallel instance in the whole circle of natural history.

When the bees are anxious to obtain a queen, they select a cell, containing the grub of a common worker: they enlarge the cell by increasing its diameter, and carrying up the walls higher. They inject into it a peculiar liquid, and it is supposed, feed it with different food. After the expiration of a few days it comes out a perfect young queen. There is no mistake or exaggeration in this. It is proved by dissection that the grub thus tended, would have been born a worker, but for the change, which inexplicable as it may appear, the bees seem capable of effecting at will, as shown by repeated experiments of the most careful observers. We cannot account for this, and we know of nothing like it. It only furnishes us with another and more cogent reason for viewing with devout admiration the various degrees of instinct bestowed on the creatures, by that Being, who has fitted "every living thing" to the station he has intended it to occupy, and enabled it to provide for all the emergencies which its habits render it liable to meet with.

E.

RELIGION ALTOGETHER A WORK OF
DIVINE GRACE.

GRACE must be given to all who diligently seek for it. But, if we attend to the Scripture account of every man, woman, and child by nature, we shall find that this seeking also is the effect following upon grace received; not the cause producing it. By this I mean to say, that the very act of seeking grace proves that we have received grace already; and that the very ability to seek, is itself the free gift of God's sovereign grace. If "every thought of man's heart is evil, and that continually," surely it is not out of that heart that the first desire of any good thing can spring. If, by nature "there is none that seeketh after God," whence can the first attempt to seek him arise, but from free grace drawing us contrary to nature? Freely must grace be given to enable us to seek at first; and freely must it be continued, to enable us to go on seeking.

I know that none shall seek the Lord in vain; none who come shall be cast out; none who believe shall come short of everlasting life; none who choose the better part shall have it taken from them; but then, none can seek the Lord unless he first seek them; none can come, except it be given them of the Father; none can believe, save as many as are ordained to eternal life; none can choose Christ, except he first choose them. If, again, we consider the magnitude of the change, which must take place in every sinner's heart, before he can truly and earnestly seek God, we shall be convinced that no part of it is properly his own. He "must be born again;" must become a "new creature;" "old things must pass away, all things must become new;" he must "pass from death unto life;" "from darkness to light; from the power of Satan unto God:" from "going about to establish his own righteousness, to submit himself to the righteousness of God;" and this, to a proud carnal heart is the most difficult of all. And who is sufficient for these things? Who but He that first formed us in the womb, can cause us to be born again of the Spirit? Who but He that originally created us, is able to "create us anew in Christ Jesus?" Who but the Giver of natural life can give us spiritual life; and quicken those that were "dead in trespasses and sins?"

When the Lord of life stood by the grave of Lazarus, and said, "Lazarus,

come forth;" who would say, that this act of lifting up himself was the cause of his being able to lift up himself? It is thus, when Jesus, by his word and Spirit, says to the heart of a sinner, "Awake thou that sleepest, and arise from the dead, and Christ shall give thee light." Instantly that dead soul arises, and its first act is seeking, or prayer; but this same act of seeking is the effect of spiritual life, not the cause. We pray, because we are alive, not that we may live. We cannot quicken ourselves when dead in sin, any more than we can bring a dead body to life. But when Jesus has quickened us, we shall as surely perform all those actions, which demonstrate the soul to be spiritually alive, as a dead body, when raised by Divine power, will surely perform all the functions of a living person. Grace, great grace, must be infused, to enable us to seek at all; and He who first gave grace to seek, will give more grace in answer to that seeking, thus fulfilling that precious scripture which saith, "To him that hath, shall be given." We neither begin nor carry on the work of grace in our own hearts. "Jesus is the Author and Finisher," the Alpha and Omega," of our faith. From the first spark of grace that faintly glimmers upon us here, to the full blaze of glory which shall burst upon us in heaven—all, all, is his doing. It is He that made us alive, spiritually; not we ourselves. It is God who both begins the good work in us, and also will "perform it unto the day of Jesus Christ."—*M. J. Graham.*

PARENTAL KINDNESS ACKNOWLEDGED.

THE fathers in Madagascar generally carry their little boys on their shoulders, where the latter are seated erect, and held by the father's hand. Mothers carry their children, according to the usages of the country, on their backs, or their side, resting on their hip; and a custom prevails in the island, which marks, in a pleasing manner, the operation of filial affection: children are in the habit of occasionally presenting their mothers with a piece of money, called *fafon-damosina*, "the remembrance of the back," as a sort of grateful acknowledgment for the kindness of the parent in having so often born the infant on the back.—*Ellis.*



Neophron Percnopterus.—SAVIG.

PHARAOH'S CHICKEN.
Neophron Percnopterus.—SAVIG.

AMONG the various animals sculptured on the temples and statues of the ancient Egyptians, and which were evidently regarded as sacred by a people sunk in the lowest idolatry, occur the figures of a bird, known at present in Egypt under the denomination of Pharaoh's chicken. This bird belongs to the vulture family; but the cheeks and throat are alone destitute of feathers,—a point in which it resembles the Turkey buzzard, of America, rather than the genuine vultures; these being remarkable for the nakedness of the whole of the neck, which at the base is surrounded by a frill or roll of downy feathers. The present bird is one of the most widely distributed of the vulture family: it is now as abundant in Egypt, as it was in ancient days, and it is common in Malta, Spain, and the southern districts of Europe. It extends over Turkey, Syria, Persia, and India; and over the greater part, if not the whole, of Africa. It is met with occasionally at the Cape of Good Hope; and is abundant in Namaqua-land, and especially along the borders of the Orange river, where it exhibits but little fear of man, allowing itself to be approached without taking to flight. Levaillant, who met with this bird abundantly in his travels, informs us, that the natives of Namaqua-land call it *ourigourap*, which

signifies "white crow;" and that the Hotentots term it *hoa-goop*, which has the same meaning. He adds, that it builds its nests on rocks, and lays three or four eggs. Occasionally this bird wanders into the northern portions of the European continent. It has been killed in Norway, whence Buffon received an adult specimen, which he placed in the national museum. It also claims a doubtful place among the Fauna of the British islands. A specimen, at present we believe in the possession of the Rev. A. Mathew, of Kilve, in Somersetshire, was shot near that place in October, 1825. Mr. Selby, who records the fact, states, that "when first discovered, it was feeding upon the carcass of a dead sheep; and had so gorged itself with the carrion, as to be unable or unwilling to fly to any great distance at a time, and was therefore approached without much difficulty, and shot. Another bird, similar to it in appearance, was seen, at the same time, upon wing, at no great distance, which remained in the neighbourhood a few days, but could never be approached within range, and which was supposed to be the mate of the one killed. The state and colour of this individual, judging from the descriptions of M. Temminck, and other authors, indicate a young bird, probably of the first, or at the farthest, of the second year." We need scarcely observe, that

the occurrence of this bird in our island can be regarded as merely a matter of accident; it is not one of even our rarest and most irregular visitants; and we cannot but regard this pair as young wanderers from Spain, where the species is very common. Capt. S. E. Cook, R.N., in his Sketches in Spain, 1834, observes, that "the small, or Maltese vulture, is in great numbers near Seville;" and adds, that "they follow the plough in the manner of rooks, picking up the grubs," etc., on which they feed in default of carrion. To the habits of the vultures, to their powerful flights, and love of the most noisome matters which the surface of the earth affords; carrion, and the *rejectamenta* of the filthy cities of the East, for the possession of which they contend with the jackal and pariah dog, we have at various times alluded. In these respects the present species exhibits all the characteristics of its race. The foulest carrion is sought out, and devoured with avidity; and in Cairo, and other towns in Egypt, it is contrary to law to disturb or kill these birds; they are, in fact, not only the tolerated, but the privileged scavengers of the streets; and from being never molested, they become confident and familiar: they may be seen quietly perched on the terraces of the houses, in the most noisy and populous parts of the town, secure amidst crowds, who regard them with respect, and even pleasure. It was, no doubt, from a sense of the utility of this bird, in freeing the crowded cities of Thebes and Memphis, in days long past, of putrescent offal, that the priests held it sacred, like the ibis, and taught the people to hold it in reverence. In like manner, the same services in the present day have gained for it, if not religious reverence, at least the utmost toleration, if not universally, at all events in Egypt, and the adjacent regions.

The *percnopterus* is not, however, a mere frequenter of the towns in Egypt; it is distributed abundantly over the desert; it is a constant follower of the caravans which cross the arid wastes; and it devours the carcasses both of men and beasts which perish by the way. Though common in Syria and Turkey, the *percnopterus* is by no means so numerous in these countries as in Egypt; not because these countries do not afford it carrion in abundance, but because it does not there enjoy the same prerogatives as in Egypt, where a respect and a con-

sideration, handed down from the earliest ages of antiquity, still continue in force, and shield it from molestation. This indulgence is extended to it in some districts of South Africa, or was at least in the time of Levaillant, from whom we learn that they live solitary or in pairs; although they congregate around a carcass, which is a general rendezvous for themselves and others of the vulture family. To all the villages of the natives a pair of these birds is attached: at night they roost on trees in the vicinity, or on the fences which bound the enclosures for their cattle; and by day they clear the precincts of the village of filth and offal of every description; adding to this good work a demolition of snakes, lizards, etc., which they devour, in default of other and more luxurious fare.

The statement of Levaillant, that this vulture is solitary, is contradicted by other authorities; and among others, by colonel Sykes, to whose account we shall have occasion to advert.

Bruce, who was well acquainted with the present species, and who noticed its abundance in Egypt, observes, that it is there, as also in Barbary, called *rachama*, a name referring to the mixture of black and white, which characterizes its plumage. The name *rahama*, from which, according to some accounts, the word *rachama* is derived, is applied to a peculiar race of sheep, distinguished by their pie-bald dress, common in certain parts of Arabia. In the opinion of Bruce, however, the term *rachama* is derived from the Hebrew *rechem*, a word denoting the attachment of the female to her young; and in proof he instances, that the *rachma*, or vulture, in ancient times, was sacred to Isis, and regarded as an emblem of parental affection. It is stated, indeed, that this species displays the most lively solicitude for its progeny. The young continue, during four months, under the immediate care of the parent-birds, by whom they are assiduously fed and protected.

The *rechem* was among the unclean birds enumerated by Moses; and it is not unlikely that Bruce may be right in his conjecture. Some, however, are inclined to regard it as the flamingo, or one of the tribe of water-birds; but the decision of this point is not of material consequence. From the nature of its food, the *percnopterus*, while living, emits a most offensive scent; its flesh is tainted, as it were, with putrescency; and

when the bird dies, it is said to putrefy with great rapidity. The same, indeed, may be said of all the vulture race: they diffuse a disgusting effluvia around them, which is communicated to the hands and dress of any person who may venture to come into contact with them. When at rest, the *percnopterus* sits with its long wings drooping heavily; and its whole contour gives the idea of sluggishness and indolence. Sluggish, indeed, it is when gorged with food; for it eats, if the feast be abundant, until scarcely able, notwithstanding the length and power of its wings, to elevate itself into the air; and having flown with difficulty to its accustomed perching place, or some convenient situation, it rests almost motionless till its meal be digested. Far otherwise, however, does it appear when eager in search of its loathsome banquet; it is now seen soaring in the air, and sweeping round in wide circles, intent upon the earth below; until having discovered its booty, down it plunges, and begins the feast. Contrary to the statement of Levaillant, it is gregarious in its habits, as was observed by colonel Sykes, who places it in his catalogue of the birds of Dukhun, India, with the following note: "*Irides*, intense brown.

Gregarious. Sexes alike in adult birds; but non-adult kinds vary from fuscous to mottled brown and white. These birds are always found in cantonments and camps. For the most part of the day they continue on the wing in circles. When on the ground, they walk with a peculiar gait, lifting their legs very high. They are efficient scavengers."—See *Proceedings of Zoological Society*, 1832, p. 78.

In size, the *percnopterus* is among the smallest of its family; it somewhat exceeds a raven, being from two feet five inches to two feet seven inches in length; and five feet eight or nine inches in the expanse of its wings. The plumage of the bird, when fully adult, is white, with the exception of the greater quill feathers, which are black. The naked skin of the forehead, cheeks, and throat, is wrinkled irregularly, and of a yellowish or livid flesh-colour; the feathers of the back of the head are long and narrow, and form a sort of crest; and there is a little white down between the base of the beak and the eye. The bill is elongated, slender, straight, abruptly hooked at the tip, and furnished with an extensive basil cere. The adult plumage is ac-

quired by a series of changes, one occurring at each moult for three or four years. The first livery is umbre brown, which becomes duly intermixed with patches of cream white; the latter prevailing more and more, and becoming whiter at each moult, until the permanent colour is assumed.

The genus *neophron* is exclusively restricted to the older continents, namely, Europe, Asia, and Africa; and as far as we know, the present bird is the only species of that genus. The nearest genus peculiar to America, is that termed *cathartes*, of which the Turkey buzzard or vulture, (*c. aura*) and the black vulture, (*c. atratus*) are examples. The habits and manners of these birds are similar to those of the *percnopterus*; and the birds themselves are respected for their utility. "The Turkey buzzards," says Wilson, "are gregarious, peaceable, and harmless; never offering violence to a living animal, or, like the plunderers of the falcon tribe, depriving the husbandman of his stock. Hence, though in consequence of their filthy habits they are not beloved, yet they are respected for their usefulness; and in the southern states, where they are most needed, they, as well as the black vultures, are protected by a law, which imposes a fine on those who wilfully deprive them of life. They generally roost in flocks on the limbs of large trees; and they may be seen, on a summer morning, spreading out their wings to the rising sun, and remaining in that posture for a considerable time." Their bodies are disgustingly fetid; their flight is powerful, rapid, and soaring; their gluttony excessive, so that they are often seen incapable of rising from the spot where they have feasted. Such, indeed, varied in certain details, is a picture of the whole of the vulture family. M.

REMINISCENCES OF GREECE AND ASIA MINOR.

FIRST VIEW OF GREECE.

It was the happy fortune of the writer of this article, to spend four months of the summer of 1831, in the language of seamen, "at the Arches;" but, in the more intelligible dialect of landsmen, in cruising among the islands and along the shores of the Egean Sea. The morning of the 25th of April, as fair and balmy a morning as ever dawned upon the most enthusiastic lover of the

beautiful in nature, revealed to our delighted eyes portions of the coasts of Messina and Laconia, with the snow-capped summits of Taygetus distinctly visible in the back ground. We had a light breeze dead aft, a smooth sea, and a cloudless sky. Every sail that would draw, even to the royal studding sails, was set. We sailed all day along the southern coast of Greece, a wild, rocky, iron-bound region, with here and there a little white-washed village, planted in the midst of desolation,—miserable enough in reality, but showing picturesquely in the distance. There was not, therefore, much in the scenery itself to awaken interest; but it was Grecian soil, and that was enough; the burial places of the memory gave up their dead. Images of the heroism, genius, learning, and taste of the ancient Greeks, as displayed in their wars, their poetry, their philosophy, and their sculpture, sprang up in throngs, as if evoked from their repose by some wizard power. The shades of those illustrious men whose memory is embalmed in deathless song, seem still to haunt the places, which their virtues or their crimes had rendered objects of such intense interest. The aspect of such places seems to annihilate time; the fictions of poetry and the records of remote history appear to be realized; and the spectator almost fancies himself actually witnessing scenes, which have, perhaps, never had an existence, except in the imagination of the wandering bard.

A DAY'S SAIL AMONG THE CYCLADES.

The morning of the twenty-seventh, found us lying-to off the island of Milo, and the union-jack floating at the fore-top-mast head for a pilot. Having shipped two of these indispensable requisites of safety for all vessels navigating the waters of the Archipelago, we filled away again, with a cracking breeze nearly aft. This was one of the happiest days of my life. We were dashing along most gallantly, at the rate of ten knots an hour, over the foaming surface of the Egean, with generally nearly a dozen islands in sight at the same time. Before sunset, the last of the Cyclades was astern of us, while far ahead could be seen, dimly breaking through the distance, the outlines of "Scio's rocky isle." All the islands, composing the group of the Cyclades, are rugged and rocky in the extreme; some of them being evidently of volcanic origin.

SMYRNIOT SCHOOLS.

I had letters of introduction to the Rev. Mr. Brewer, an American missionary in Smyrna, by whom I was kindly received, and hospitably entertained. Mr. Brewer has already reared to his memory a monument more durable than brass, in the schools he has established in Smyrna, and other parts of Asia Minor, and in the affections of thousands of grateful people. He is a gentleman of uncommon modesty and amiableness of temper, but of great firmness of character, and unwavering perseverance in whatever he undertakes. In addition to the labour incident to the superintendence of various Greek schools in Smyrna and the vicinity, to preaching regularly every sabbath, and to much visiting, he taught a Frank school himself, in which, however, he was aided by a worthy young lady, Miss Reynolds. This school was made up of the children of European and American merchants, and was the first of the kind ever known in Smyrna. The pupils dressed in the costumes of their respective countries. Their appearance was therefore somewhat motley, but not without a picturesque effect. The common medium of intercommunication was the modern Greek language, and in that tongue the studies of the school were carried on. The school was opened and closed with prayer, and religious instruction was faithfully imparted. It was delightful to behold the beaming intelligence, the cheerful industry, and the invigorating sports of these young immortals, and to reflect that they were not only receiving healthy mental culture, and gaining useful knowledge, but were also diligently trained up in the "nurture and admonition of the Lord."

During our stay in Smyrna, I often visited the Greek female schools under Mr. Brewer's charge, and was not more delighted than surprised, at the perfect order with which they were conducted, the eager desire and love of knowledge manifested by the pupils, and the rapid progress they made in learning. The schools were conducted on the Lancasterian plan, by native teachers; and the children were instructed not only in all the branches taught in our common schools, but in knitting, needle-work, etc. I saw little girls who had commenced going to school only a few months before, who could already write a fair hand, and read with tolerable facility in the Testament. (1) edit this text

Mr. Brewer's schools were the first ever established in Smyrna, at least in modern times, for the cultivation of the female mind. They filled all Smyrna with amazement. Females, by the servile Greek, as well as by the haughty Othman, are regarded as the mere slaves and playthings of man. Females capable of intellectual culture! the thing was unheard of, and produced a dreadful whirling in men's ideas of truth and propriety. But the experiment was made, and succeeded even beyond the hopes of its authors. Its effects were by no means limited to the schools which Mr. Brewer founded, but were seen also in the revolution they had produced in public sentiment, and the consequent exertions made by many of the more wealthy Greeks, to educate their daughters at their own expense.

The principal establishment in Smyrna, for the education of Greek lads, is the college of Abraham, a learned Armenian Greek, whose character is marked by great originality, and whose history is strongly spiced with the romantic. Possessing a mind of extraordinary acuteness and vigour; at first a devotee, then an infidel, and finally a consistent believer; his orbit has been eccentric and devious to the last degree; but throughout the whole of it, he has retained two master sentiments,—an enthusiast's love of Grecian literature, and a patriot's devotion to Grecian liberty. He is profoundly read in his country's classics; and the wish that his countrymen may again imbibe the generous spirit, emulate the heroic virtues, and reveal the intellectual supremacy of their ancestors, has been so long and so deeply cherished, that it has become a part of his being. His school was large, and supplied, in part, the loss of that invaluable institution, the college of Scio, which perished in the general ruin of that ill-fated island.

There was also in Smyrna a school for Armenian boys, numbering, when we were there, about one hundred and fifty pupils; besides several for the sons of the faithful.

EDUCATION IN GREECE.

In visiting the various towns and cities in Greece, the facilities for intellectual culture were an object that always attracted my earliest attention, and excited the liveliest interest in my mind. Whatever sins the Greek nation laid to the

charge of Capodistrias, then president of the Republic,—and these were neither few nor small,—it cannot be denied that that accomplished, but unfortunate man, gave to the cause of education the countenance and support of an enlightened and patriotic statesman. Schools were every where established, and conducted with spirit and a good degree of success. The system of Bell and Lancaster was generally adopted as best suited to the resources and state of the country. Whatever may be thought of its intrinsic merits, it unquestionably produces the largest results from the smallest expenditure of money.

There was a very large Lancasterian common or primary school in Napoli, the then capital of Greece, at which I was often present. It numbered over two hundred scholars; and a more sprightly, intelligent, industrious, and orderly collection of lads, it has never been my fortune to behold. The discipline seemed to be perfect. All general movements had the precision and regularity of machinery. Each boy had a portfolio slung over his shoulders, and an ink-horn inserted in the girdle round his waist. The walls of the school-room were covered with cards, containing elementary lessons in large capitals. The principal studies were reading, writing, arithmetic, grammar, drawing, history, and ancient Greek. The Greeks have a remarkable facility for rapid acquisition. A few months are, in almost every case, sufficient to enable them to read fluently, and to write with ease and even elegance; and in that same school at Napoli, which had been in operation only three years, I saw many specimens of drawing, that would not have discredited the academies of Italy.

About a month before our arrival at Napoli, a classical school had been established there. It already numbered eighty scholars. The studies chiefly pursued were the ancient Greek classics, geography, history, mathematics, and astronomy. I heard the class in astronomy recite; and such intense interest as the pupils manifested, I have rarely beheld. One of them disputed a position in the lesson relating to the movements of the heavenly bodies, and boldly joined issue with his teacher on the point in question. The discussion was long, bold, and animated; and the result was a complete victory by the teacher. When the young sceptic was

forced to strike his colours to the power of truth, a murmur of approbation ran through the class, and the master doubtless gained something in the estimation of his pupils. This is but an exemplification of that insatiable thirst for knowledge, and that untiring eagerness in the pursuit of it, so characteristic of the modern Greeks. - Anciently it was said of them, by one who had ample means of knowing, "the Greeks seek after wisdom," and the same trait seems no less prominent in their character in our times.

The buildings occupied by these schools were originally mosques. It was gratifying to behold these temples of a false and bloody religion now appropriated to such noble purposes. Their walls and vaults were hung with festoons of flowers, which filled the air with fragrance, and gave the apartments a cheerful and lively air. During the carnival, they are converted into brilliantly decorated ball-rooms, and the solemn and sombre rites of Islamism are forgotten amid the gay festivities of the Grecian dance.

THE TEMPLE OF THESEUS AT ATHENS.

This temple has suffered less from the ravages of time than any other ancient edifice in Greece. It was built by Cymon, after the battle of Salamis, nearly five hundred years before the Christian era. Yet it may be said, in fact, to remain entire, having received only a slight injury in one of its corners from a stroke of lightning. The order of architecture is a pure Doric, and not a stone was employed in its construction but the finest Parian marble. During the three days that my companion (Mr. J.) and myself remained at Athens, we often stopped to contemplate this exquisite remnant of antiquity, this most beautiful specimen and monument of the architectural taste and genius of the Greeks; but how feeble would be the most vivid description I could frame, compared with the emotion it awakened in our minds! We never passed it without pausing a few moments, and each repeated survey only enhanced the admiration and delight with which we gazed upon the matchless harmony of its proportions, the spirit and beauty of the sculpture on its entablatures, and the inimitable elegance and finish of its entire workmanship.

MODERN ATHENS.

We had not time to devote much atten-

tion to modern Athens. It had suffered greatly from the war, nearly half of it being a pile of ruins. A considerable proportion of the materials of which the city is built are ancient marbles; and it is no uncommon thing to see exquisite pieces of sculpture inserted in walls composed of unwrought stones and mud. Athens, at the time of our visit, was still under the Turks, but not more than four or five hundred of them resided there. The Greek population, we were informed, consisted of about five thousand families. They were greatly oppressed by their masters, but nothing can destroy the elastic buoyancy of the Greek's spirit. We were, on one occasion, overtaken by night at the ruins of the temple of Jupiter Olympus. Not choosing to traverse the city for fear of losing our way, or encountering still more disagreeable adventures, we made the whole circuit of the walls to the Theseum, passing, however, part of the distance inside of them. In the skirts of the town, we saw the peasants collected in groups before their little huts, after the labours of the day: some engaged in conversation; some dancing to the music of the Turkish guitar; some formed into circles around their humble suppers; and others stretched on mats, spread in the open air, or under temporary coverings formed of the boughs of trees. Their dogs, horses, and jackasses kept them company.

CORINTH.

We arrived in Corinth a little after dusk, and took lodgings near the heart of the modern town, at the only locanda; or public-house in it, laying any claim to decency. Supper was served in the little portico in front of the locanda; and a curious lesson it was, that we read on the revolutions of time in our table and its furniture. Corinth was once the great focus of luxury and fashion, crowded with the devotees of pleasure from every quarter of the globe. In 1831, in this same Corinth, a party of thirteen American officers, I was going to say sat down, but more than half of us stood, because there was not room for us to sit around a little table, whose only furniture, in addition to what we ourselves had carried, was a dirty and ragged linen cloth, an old Britannia teapot, three earthen plates, two tumblers, and as many rusty knives and forks. Our accommodations for the night were

in keeping with our supper table. Our host managed to "rig up" a bed for the captain, and another for the surgeon, but the rest of us were all crammed into a single apartment, and had nothing but mats to lie upon, while we were obliged to make pillows, as best we might, out of our own apparel. But had we reclined on beds of down, it would have been impossible to sleep much. The fleas were beyond all endurance. The reader will not be surprised, therefore, that at three o'clock we were all up, and engaged in preparation for ascending the Acropolis. Having taken a hasty cup of coffee, at four A.M., we began the ascent. It was winding, steep, and laborious. At the summit was a small tower, to the top of which we managed to climb; but what pen can describe the prospect it presented to our eyes? I have beheld with rapture the extensive and magnificent prospects obtained from the Keep at Carisbrook Castle, in the Isle of Wight, from the Rock of Gibraltar, from the leaning tower of Pisa, from the dome of the cathedral of Florence, from the ridge of Vesuvius, from the theatre of Alexandria Troas, and from the heights of the Acropolis of Sardis; but which of them can be compared to that enjoyed by a person on the top of the Acro-Corinthus? Not one. Here the view is without limits in every direction, and comprehends every variety of scenery, from the most desolate sublimity, where "eternity is throned in icy halls," to the softest beauty that adorns the enchanting vales of Greece. Standing with his face towards the Gulf of Lepanto, the spectator has before him the plain of Corinth, from four to five miles wide, and from ten to fifteen long, gay with numerous villages, and diversified by extensive olive groves, green parterres, and golden wheat-fields. On his right, the gigantic ranges of Cithæron, Helicon, and Parnassus, their summits glittering with everlasting snows, or towering far into the regions of the clouds, stretch in apparently interminable lines into the interior of Northern Greece. Turning his eye to the left, it rests on the Peloponnesus, exhibiting mountains piled on mountains, with here and there a green valley, smiling amid the desolation that encircles it. Then changing his position, so as to face the east, he looks down upon the Saronic Gulf, its bosom gemmed with innumerable verdant islets; and far beyond, he discovers the Promontory

of Sunium, and the coast of Attica, among whose hills shoots up the Acropolis of the City of Minerva.

E. C. Wines.

Princeton, New Jersey.

THE LEECHES—OR UNCLE BARNABY ON ADAPTATION.

Who is there that has not experienced the efficacy of that beautiful and useful reptile, the leech, in assuaging pain by subduing inflammation? Of the many thousands that are constantly kept in readiness for use by every surgeon, apothecary, and druggist in England, nearly all, I believe, are imported from the south of Europe. During the long war that set at variance all the powers of Europe, and cramped their foreign commerce, it was with extreme difficulty that any importations of the useful and delicate little creatures above referred to was effected; and the price, in consequence, was enormously high; hence the resources afforded within our own country were proportionably raised in value. A leech stream was considered a valuable acquisition to an estate or a neighbourhood; and the gathering of leeches furnished employment and profit to many poor families. A stream of this kind ran through my uncle's grounds, and frequent applications were made for his permission to gather leeches there. One fine summer evening we stood for some time watching a boy thus employed. He had a small net fastened to the end of a stick, which he kept dipping in the stream, and drawing up, but without success, although the little creatures were to be seen in great numbers rapidly gliding by. Wearied with trying in vain this mode of attack, he made another attempt; leaning over the edge of the stream, and endeavouring to catch the leeches in his hands, but they invariably slipped through his fingers. A stick and a string with a crooked pin at the end, which lay on the bank, intimated that he had also tried angling. We pitied the poor boy's want of success, and inquired how long he had been thus employed. He replied, almost the whole day; and that he had only obtained one leech, which he showed us. It appeared to have been bruised in taking, and was most likely unfitted for use. As the poor boy appeared weary and faint, and had derived from his day's labour little or nothing of the means of support, my uncle kindly sent him to the kitchen for

some food, and we passed on our way. At a considerable distance from the former spot, we came to another winding of the same stream, and there saw a boy standing bare-legged in the water. My uncle inquired what he was doing. "Leech-gathering," was the reply. "But where is your net?" asked my uncle; "how do you catch the leeches?" With a significant grin, the boy replied, "I doant want a net, your honour; I catches 'em with my legs." Presently he stepped on the bank, when several leeches appeared sticking to his flesh. These he gently removed, and carefully deposited in a vessel of water, which already contained several more; and again he took his place in the stream. "How long have you been catching these leeches?" asked Frank. "Ever since I gave over work at six o'clock, master," answered the boy. "And how shall you dispose of them? and what are they worth?" "They be worth what they fetches," returned the boy with another shrewd grin; "if the doctor happens to want 'em, mayhap I may get a groat a-piece." "Well," observed my uncle, "this is a very clever plan of catching fish, without nets, lines, or baits." "It would not do for all sorts of fish, your honour; but it is the nature of leeches to suck flesh, and so there's nothing like flesh to catch 'em wi'."

"See, lads," said my uncle, "as we passed away from the successful leech-catcher, "the importance of adapting the means employed to the end we have in view. By this kind of adaptation, the lad we have just left has accomplished more in an hour's recreation, after his regular day's work, than the other poor fellow by his ill adapted efforts through a whole day."

"Would it not be right, uncle, for us to go back, and tell the other boy that there is a much easier and better way of catching leeches?" "I think it would—though I am by no means sure that your information will be as thankfully received as it is benevolently intended."

On our return, we saw the first boy coming away from the kitchen, where, according to my uncle's orders, he had been plentifully regaled. He collected together his net and lines, and was proceeding homewards with the produce of his day's labour—one poor, half-dead leech—when we met him, and entered into conversation about the more successful experiment we had witnessed.

He received the communication with indifference, not unmingled with prejudice—seemed to despise the idea of attempting to catch the creatures without net, line, or bait, and shrunk from exposing himself to their bite. Whether or not he persisted in his notionless method, whether he adopted the more rational plan that had been suggested to him, or whether he altogether abandoned his trade of leech-gathering, I do not recollect, but the incident was frequently alluded to by my uncle. He would say, when a thing was awkwardly and unsuccessfully attempted, "It was like catching leeches with a net;" or if set about dexterously, he would say, "That person intends to succeed; like the boy who stood in the water to catch leeches."

I remember Uncle Barnaby saying, that there were four rules of adaptation which, if they were constantly observed, would tend much to facilitate and give success to all our undertakings. He said it would not be lost time in the beginning of an enterprise to bestow due consideration on these particulars. Many years have passed since this conversation, and I have never yet seen reason to dispute the correctness of the observation. I have always found my advantage in thus employing forecast and contrivance; and I have often had occasion to regret rashly embarking in any undertaking, without having duly considered and adapted my instruments and means. "Every purpose," said the wise man, "is established by counsel." "Prepare thy work without, and make it fit for thyself in the field; and afterwards build thine house," Prov. xx. 18; xxiv. 27.

My uncle's four rules were—

Choose well your instruments.

Apply them rightly.

Prefer attraction to force.

Employ personal application.

My uncle sometimes made his remarks on very trifling things, which, nevertheless, served to fix on our minds lessons of practical wisdom that were applicable to greater matters. One day, when I was a very little boy, there were green peas on the table. I was helped to some peas, but, being furnished only with a two-pronged fork, as fast as I loaded my fork, and attempted to raise it to my mouth, the peas slipped through, thus tantalizing my expectations, and moreover, rolling on the damask table-cloth, or the Turkey carpet. My uncle observing my embarrassment, kindly desired

the footman to supply me with a more suitable article for bringing the favourite vegetable into contact with my palate. He said it was "like eating hasty pudding with a knitting-needle." The reader is most likely aware, that hasty pudding is of a consistence similar to that of thick gruel. Judge then, kind reader, how long it would take for a hungry man or boy to satisfy himself, if he had no more convenient means for bearing it to his mouth than a knitting-needle. My uncle's homely, but correct illustration has often recurred to my mind, when I have attempted, or seen other people attempting, to effect any purpose with a very unsuitable instrument. The remark applies to the employment of intelligent agents, and to the pursuit of knowledge. Every rational creature is fit for something, but not fit for every thing. It is the part of wisdom to ascertain for what we are best adapted, and to employ our energies accordingly. Knowledge is in itself valuable, but there are some kinds of knowledge better adapted than others to fit us for the station we have to fill, and the duties we have to perform; and that is best which is most suitable to us. Parents sometimes make a great mistake in the education of their children, bestowing a great deal of time, property, and labour, on the attainment of knowledge, which, in all probability, will be of little or no use to them in future life; while such knowledge as is really essential to their respectability, success, and usefulness, is comparatively, if not altogether, neglected. Is not this the case when the farmer's or tradesman's daughter, who will, in all probability, one day be a farmer's or a tradesman's wife, spends years in learning French, music, and embroidery, while she grows up ignorant of arithmetic, domestic business, and needlework? And is it not much the same with the classical studies, as they are called, of lads designed to stand behind the counter? A thorough acquaintance with their own language—with practical arithmetic—with men and things—and with the book, and works, and ways of God, would have been ten times more valuable in fitting them for future life, than all the Greek, and Latin, and heathen mythology, to which the attention of boys is often exclusively directed.

My uncle once mentioned hearing an excellent, but somewhat eccentric minister, in his counsels to a young brother,

urge upon him to regulate his studies with reference to his great work, and the character of his preaching to the capacity and character of his flock. He spoke of going into a cutler's shop to purchase a knife, and supposed the cutler inquiring of his customer what sort of knife he wanted—for, says he, we have pen-knives, and pruning-knives, and butcher's knives, and currier's knives—it is not every knife that will suit every purpose. "The knowledge required for your purpose, my young brother," said the aged minister, "is a knowledge of the Bible and of human nature: any other kind of knowledge that you may attempt to substitute for these, will be as unsuitable and useless in your work, as if the schoolmaster should attempt to make pens with a hatchet, or the woodman to fell timber with a pen-knife." So, whatever work we undertake, it is wise to furnish ourselves with suitable instruments.

We may sometimes be called to take the lead of others. In that case it is no mean evidence of practical wisdom, to assign to each the part which he is best qualified to fill. Without this discrimination, and division of labour according to individual fitness, a whole concern is often thrown into confusion—one department of labour is crowded, and another deserted. Persons who might have been very useful in their own sphere, become positively mischievous when meddling with matters which they do not understand, while they neglect others for which they were qualified, and thus the undertaking is either left unfinished and altogether abandoned, or, if persevered in, the results are of a very imperfect and unsatisfactory kind. Much labour and expense are needlessly bestowed, and very little real advantage and usefulness obtained. A gentleman about to engage in an important enterprise, applied to three friends, and inquired what co-operation he might expect from them. The reply was, "T. N. will give advice, T. P. will give money, J. B. will give personal assistance." Thus, each contributed according to his own order. The assistance of each was valuable of its kind, and the work was happily effected. So it was in the rearing of the tabernacle of old. All could not give gold or silver; but some who had not these costly metals at command, had skill, and wrought willingly with their hands; and their ingenuity and industry were as

usefully employed, and as acceptably consecrated, as the costly gifts of the wealthy. Thus the great Proprietor of all adapts his instruments to the work which he has appointed for them to perform.

"God gives to every man
The virtue, temper, understanding, taste
That lifts him into life, and lets him fall
Just in the niche he was ordained to fill."

My uncle's second rule was, "Apply them rightly." It is not merely bringing in contact the fit instrument with the material to be wrought upon; there are generally two ways of handling a tool—a right way, and a wrong. He that attempts to cut with the back of a knife will fail in his object, and cut his fingers. He that has a heavy body to move, may knock and push till he wearies himself, and breaks the stick with which he made the vain attempt; but which, had he slid it under as a lever, would have easily raised the body, and made its own weight subservient to its removal. The same strength and patience, that, rightly applied, would suffice to loosen a knot, if misdirected only tighten it. Thus, too, rational beings may be laid hold of the wrong way; and those who might have been useful are rendered mischievous, by calling into exercise their bad feelings and passions, instead of their best. Thus, an appeal to the vanity, self-love, or emulation of children, though it may lead them to perform an action right in itself, entirely alters the property of that action, both in its influence on themselves, and its tendency to usefulness.

My uncle's third rule was, "Attraction is better than force." I remember the occasion on which he made this remark. My cousin, Mrs. Mortimer, was visiting there with her first baby, a lively little creature, who used to be laid on the carpet or hearth-rug to kick and crawl about. The nursemaid stood by to watch him, with her needle-work in her hand. She happened to break her needle, and let it fall on the rug where the child was playing. My cousin caught up the child, and carefully inspected his clothes, lest the needle should be lodged in them, meanwhile the servant was hunting the rug and carpet. One end of the needle was found, but the other still escaped detection. The baby struggled again to get down to his playthings, but his mother would by no means consent to put him down until the broken needle was found. The rug was taken out of the room, and beaten; but as the needle had not been

actually found, my cousin could not be satisfied, although most of the persons present said there was no doubt it had been shaken out. At length, a happy thought occurred to Frank. He took from his pocket a magnet, and drew it a few times across the rug. The kindred steel acknowledged the attractive power, and started up from its woolly labyrinth, to the great satisfaction of my cousin, as well as that of her son, who was safely and confidently restored to his favourite play-place. "There," said my uncle, "is an instance in which attraction is better than force. The needle eluded the brush and the stick, but yielded to the power of the magnet. If you want to induce persons to do any good action, or to win them to goodness in general, you are much more likely to win than to scold them to it. 'A spoonful of honey catches more flies than a hogshead of vinegar.'"

Even the worst of men, whom neither threatenings, terrors, nor inflictions could subdue, have not been proof against the power of kindness. This was the holy "guile" with which the apostle "caught" or gained men to their own duty and interest. Such methods the blessed God himself takes in dealing with sinners. He leads them with "the cords of love, and with the bands of a man;" and such methods have been adopted by those who have been most wise to win souls. Winning the affections of the young towards their ministers, and other religious instructors, is not converting them to Christ, but it is an appointed means for effecting that grand object, and one that is often and eminently blessed and rendered successful. A youth who had resisted many efforts of his parents and other pious friends, and still walked in the way of his own heart, and in the sight of his eyes, was at length won upon by means of a simple and affectionate message to another, of which he was made the bearer. "Well, my young friend," said a minister to him at parting, "give my love to your sister, and tell her I hope she is beginning to seek Christ. If she becomes religious, she will be happy." This seems to be the secret of the extraordinary success with which some holy men in modern days have been honoured. Their sermons and their efforts have been baptized in a spirit of love, and rendered attractive. It is strikingly and affectingly recorded in a modern piece of Christian biography—the Life of Harlan Page,

in the words of an individual, one of the numerous instances of success with which the labours of that devoted man were so eminently honoured. "Having resolved to attend a meeting for prayer, I went early, found only the sexton in the room, and sat down. Soon there came in a plain man, who spoke very pleasantly to the sexton, and then coming and sitting by my side, after a kind salutation, said, 'I trust you love the Saviour?' The question instantly filled my eyes with tears. *I had been preached to at arm's length all my days*, but this was the first time that ever a Christian thus kindly and directly put such a question to my heart. We conversed considerably together, in the course of which, at his request, I gave him my name and residence. The next day he came to my shop, and brought me the tract, 'The Way to be Saved,' which he thought I should like to read. He called again and again. I became interested in him, and the next sabbath joined his sabbath school, was brought, as I hope, to Christ, and soon united with the church." This, among unnumbered instances beside, corroborates the sentiment of Uncle Barnaby, which, in all my efforts to do good to, or by, my fellow-men, I desire never to lose sight of—"Attraction is better than force."

My uncle's last rule was, "Employ personal application." Some people do not succeed in what they set about, because, when they have furnished themselves with proper instruments, they are apt to slacken their exertions, and rest satisfied with leaving the instruments to work themselves, or with committing the operation to others. "No, no," said my uncle, "remember Poor Richard's maxim,

'He who at the plough would thrive,
Himself must either hold or drive.'

He who projects and commences a good work, if he wishes successfully to accomplish it, must keep up his own interest by personal attention to it, and not expect, if he deserts it, or grows supine towards it, that any other person will take a lively interest in it, so as to carry it on to perfection. But a well-laid plan, a judicious selection and application of instruments, the attracting together of congenial influences and powers, will tend to keep alive, in the mind of the originator of the undertaking, so lively an interest, as will insure the requisite personal attention, and prove an

incentive and encouragement to perseverance, and a pledge of success. The Lord of hosts is wonderful in counsel, and excellent in working. This appears in that work in which we are most deeply interested; and we are encouraged to entertain that well-grounded confidence which the apostle expressed, that He who has begun the good work in us will perform it until the day of Jesus Christ, Phil. i. 6.

I am quite sure, that in applying to great things the remarks which were originally suggested by trifles, my good uncle would not have failed to remind us of the necessity that we should continually seek the "wisdom that cometh from above" to direct us to worthy objects of pursuit, and to assist us in the selection and application of means and instruments, as well as to draw down supplies of heavenly strength to enable us to persevere, and the rich blessing of Heaven to prosper and crown with success our feeble efforts. C.

SOURCES OF KNOWLEDGE.

Addressed especially to Young Men.

THERE are two sources of knowledge; one, observation and experience—the other appears in books. Both are important; they tend to amplify and correct each other. He who studies nothing but books, is too theoretical, too abstract, and not sufficiently practical; he who learns from nothing but his own observation and experience, is too narrow-minded, too self-wise, too limited in the range of his thoughts. The soundest, best-furnished, most powerful and useful minds, are those which diligently learn, both from their own observation and experience directly, and also from the fruits of the observation and experience of others, as reduced to system, and furnished in books.

Studying the principles of the sciences, arts, operations of mind, human and Divine governments, from books, leads you to notice individual facts, and to refer them to the principles and classes to which they belong. Thus, if you study the principles of architecture from some scientific book, whenever you pass by an important edifice your attention will be strongly interested to notice the style and order of its architecture, to fix in your mind the most essential particulars respecting it, and to refer them to their class and order. Whereas, if you had not learned something of the science,

and been taught to classify and arrange, by a previous study of books, all would be to you an unmeaning mass. You might take the tour of Europe, and visit the finest cities in the world, and return home little the wiser for all the splendid exhibitions of architecture on which you had gazed. The same is true of botany, geology, mineralogy, conchology, ichthyology, natural history, astronomy, etc. What a boundless world of interesting study and observation to expand and exalt the mind, do the kingdoms of nature present to us! And yet, how many thousands, just for the want of a little study and attention, walk through life in the midst of them with their eyes blinded, and their souls as insensible to them, as the brutes that perish!

Render your mind scientific by study, and acquire habits of attention, and you can scarcely move from your fire-side, or even open your eyes, without seeing something to interest, exercise, and feed your intellect, and add to your mental stores; and, if your heart is right towards God, to warm it with gratitude, adoration, and love.

The same is to be said of the study of literature. Acquaint yourself with the principles and rules of grammar, with the laws of rhetoric, with logic, with the canons of good taste, and with the different kinds of style, and your mind, instantly awakened to all these things, whenever you open a book, or listen to a speaker, will thus continually increase in literary knowledge. Otherwise, you may read the finest work, and listen to the most finished exhibitions of literary excellence, to no profit. You may expatiate in the most verdant fields, and amidst the finest flowers and fruits of an intellectual paradise; and although you may feel a momentary thrill of blind pleasure, you will return from the excursion bringing little or nothing with you.

The same principle also obtains in subjects relating to business, civil government, morals, and religion. Business, as well as other subjects, has its great original laws and elementary principles. It is a science: yet how few consider it as such! How many are the mechanics, merchants, and farmers, who do not understand the principles on which their business proceeds; who only acquire a little round of practical detail, in which their minds move like the horse in a mill! They know that for some reason a sharp tool cuts better than a dull one,

and that it is well to sharpen the tool that is dull; they know how to keep an account of debt and credit, how to buy and sell, when they sell at loss or profit, and how to raise their prices when they can get more; they know the appropriate soil, dressing, and cultivating for different crops, and how to dispose of the produce; but they never think of looking for that elementary and scientific knowledge of these things, which gives to the mind expansion, elevation, independence, and power. The men who do this are those who eventually stand at the head of their departments, and give laws to the busy world.

If, by a diligent application of your mind to the study of the Bible and other religious books, and attendance on faithful preaching, you acquire some definite knowledge of the doctrines of religion; the being and attributes of God; the moral agency and accountability of man; his fallen character and condition; the nature and necessity of his moral renovation; his redemption by Christ; the fruits and evidences of piety, etc.; your observation will be directed to what is passing around you, to see the illustration of these doctrines, and to learn whether they are actually so. The evidences of the being and attributes of God will then soon begin to burst from all directions upon your observing eye. The same will be the case in respect to all the other doctrines of religion, provided you are diligent in your study and observation. What you see around you, will serve you as constant evidence and illustration of what the Bible teaches; and what the Bible teaches, will open your eyes to the reality and meaning of what is passing around you. Thus will your mind grow in sound religious knowledge.

But we ought here to notice three prominent objections to acquiring knowledge from books. The first, that to depend upon what we are taught by others, impairs the originality and independence of the mind.

To the first of these objections, I would reply, that the processes by which the mind arrives at the knowledge of facts are theoretical and synthetical, and also, analytical and inductive. The first is, taking results, as they are furnished by other minds, in the form of propositions; the second is, entering into the particulars by which these results are obtained. Thus, if I announce to you that, as the result of scientific observation, some

geologists consider that this world is a globe of liquid fire, encrusted over with only the thickness of a few miles of solid matter, I give you a theory. I do not give an assured fact, but an opinion; and you are now to study and observe for yourself in reference to this opinion, to see whether it is correct, or whether you can form any other which better accounts for the phenomena which you observe; such, for instance, as volcanoes, earthquakes, numerous appearances on the surface of the globe, indicating that it was once liquid fire, which has been cooled down; the belching forth of hot lava in places near the ocean, when the waters are supposed to communicate with it underneath, and thus produce expansion; the fact that heat increases as we dig down into the earth, etc. This theory or opinion, which you may obtain from books, does not interfere with your own investigations; it simply helps you to think for yourself, by giving you some point around which to rally your thoughts. It sets you to studying and observing nature to some purpose, by affording an object, in view of which to do it. In the course of your investigations you may become so learned as to be able to set aside this theory, and adopt some original one of your own in its place; but in so doing you must acquire a great amount of valuable knowledge.

A synthetical proposition is the same as a theory, with this difference, that the latter announces something that is supposed to be true, whereas the former announces what is thought to have been actually proved. Thus, if I lay down to you the proposition, that caloric expands all bodies; or that the atmosphere is an elastic fluid, inclining to fill all space; or that water is composed of two inflammable gases, and capable of decomposition; or that the orbs of the solar system revolve about each other and about the sun, in an exact order; or that all bodies gravitate towards the earth, with a force decreasing as the squares of the distances; or that the race of men are depraved, and prone to evil rather than good; or that the gospel is the wisdom and power of God to save man from sin, and the best means to accomplish this end which the world has ever known;—I declare what has been proved to be a fact by a long course of experience and observation. Now, many of these facts, and thousands like them, embraced by books in synthetical propositions, are of such a nature,

that your mind, unaided, would probably have never discovered them; but the moment they are announced to you, they put you to thinking and observing, in order to satisfy yourself of their evidence.

Life is too short to allow any mind to climb the whole ascent of knowledge, by its own unaided and undirected discoveries; it must avail itself of the results of others' labours. But this does not interfere with any legitimate exercise of your powers of originality and independence; for when a man refuses ascertained truths, just because others have embraced them, he is not original and independent, but weak and silly.

Having thus obtained some general principles of knowledge from books or teachers, you are prepared to examine their proof, and to satisfy yourself concerning them, by your own observation of individual facts, and by analysis. Thus, as often as you pass a blacksmith's shop, and see the circular fire kindled to heat a wagon tire, in order to get it upon the wheel in an expanded state, so that when it contracts by cooling it may press closely; or when you see the mercury of Fahrenheit reduced to zero in January, and rising to 75° in July; your attention will be attracted to two of the many thousands of illustrations of the expansive power of caloric. As often as you raise your window to receive the fresh atmosphere from without; or whenever you see an air-gun discharged; or notice the surprising force with which the atmosphere rushes to fill a vacuum, in the operations of steam-engines, you will be gathering proof of the fluidity and elasticity of atmospheric air. As often as you see the smelter or welder sprinkle water upon his fire, to raise the most intense heat, or notice how a small quantity of water upon a burning edifice—a quantity too small to overcome the heat before it is decomposed—increases the fire instead of diminishing it, you are furnished with evidence of the decomposition and inflammability of water. As often as you notice the different phases of the moon, or the periodical changes of the relative position of the planets—those calm, beautiful, starry lights, that adorn our evening sky, as distinguished from the fixed stars, flickering and twinkling in the measureless distance; or the solar and lunar eclipses, coming and going at the long-predicted seconds—you are gathering proof of the exact

scientific revolutions of the solar orbs. As often as you see bodies, so soon as their centre of gravity is not supported, begin to descend towards the earth, and their velocity increase as they approach it, you are reminded of the universal law of gravitation. Whenever you look abroad over our world, and see how men in all ages have inclined to forget God, and sink into infidelity, idolatry, and every form of sin, you are furnished with evidence of the scriptural doctrine of human depravity. When you observe the wonders which, in the failure of all other means, the gospel has wrought in delivering men from sin, and restoring them to God, you perceive some of the evidences of its divinity, and of its claims upon our faith and homage.

Acquiring knowledge by analysis and induction is only resolving a subject into its elements, or gathering up by observation the individual facts on which a theory or a synthetical proposition is sustained. This every person may do by his own observation, if his mind is first possessed of some principles to guide it. In teaching, whether by written books, or by lectures or sermons, the synthetical process is usually taken, unless there is some special reason for the opposite course. Thus, in preaching a sermon, the speaker usually first announces his proposition, and then proceeds to illustrate and prove it. But sometimes, when there is danger of awakening a prejudice in the minds of his hearers, by announcing an unwelcome truth, which must prevent their feeling the force of evidence, he judges it wise first to gain their consent to the particulars which sustain his proposition, and then to bring out his proposition at the close, as a legitimate and unavoidable inference. He thus takes his hearers by surprise, and secures their minds to the truth, before prejudice has had sufficient warning to prevent it. This, however, is a course pursued for a special purpose; it is not the ordinary method of teaching.

Now, all that is taught in books, consists either of synthetical propositions, asserting principles, or general truths proved by an inductive process; or of theories or hypotheses, which men have adopted as probable truth, or to account for otherwise unexplained phenomena; or of individual or collective facts, with courses of reasoning upon them. If you have attended to the foregoing observations, you will perceive that knowledge

obtained from such sources, so far from injuring, will only serve to aid a truly independent and original mind in investigating truth, and in forming its own opinion. When books hold their proper place, they will thus prove highly important aids to you in acquiring knowledge, but never substitutes for the most vigorous exercise of your own mental powers.

The second objection to studying books, is, that conversing with different authors and opinions, disturbs and enfeebles the mind. Doubtless a large part of the loose and miscellaneous reading of the day has this tendency. Probably not half the mental acuteness and force is acquired which might be, were a more wise and select choice of books made, and were these more thoroughly studied and digested.

But if you select important subjects upon which to acquire knowledge, and the best writers upon them, and then pursue the course which I have pointed out, always exercising your own thoughts and observations thoroughly upon whatever subject you study, the different opinions and assertions of different writers, so far from distracting or enfeebling your mind, will serve only to concentrate and invigorate it. You will be less in danger of relying merely upon what others say, more disposed to examine for yourself; while you will also be furnished with the means, and put upon the track, of personal investigation. If one writer contradicts what another asserts, you will wish to detect the fallacy; for both propositions cannot be true. Thus, if one writer lays down the synthetical proposition that caloric expands all bodies, and another lays down the proposition that caloric does not expand all bodies, you know of course that both propositions cannot be true, because they are contradictory. Yet the first author brings numerous examples in proof of his position; the latter too brings examples in proof of his—such as the potter's vessel when subjected to the furnace, the moulded brick when subjected to the heat of the kiln, etc. which contract their dimensions, instead of expanding them, under the influence of caloric. But when you come to examine this matter, you perceive that a part of the substance in the moist clay was water, which expanded and escaped under the action of caloric; so that the substance in the mass is now less than before, and of course requires

less space. So the first proposition still stands; the latter is fallacious, and its author is proved to be a superficial observer. These conflicting propositions do you no harm; they afford an excellent exercise for your own mind.

Suppose, again, that an author lays down the proposition, that all substances gravitate towards the earth, and brings you his numerous examples in proof of it. Another lays down the proposition, that all substances do not gravitate towards the earth, and brings in proof of it his examples; such as vapours, smoke, gases, balloons, feathers, etc., which frequently ascend. Both propositions cannot be true. Where is the error? You have only to remove the buoyant atmosphere, and these light substances instantly fall to the earth. Exhaust any space with an air-pump, and a feather in it will descend to the earth as rapidly as a piece of lead. Remove the atmosphere surrounding our globe, and all the vapours, gases, and clouds would drop from the skies as quickly as a cannon ball, and lie upon the earth's surface as firmly as do the solid rocks. The explanation then is, that the atmosphere is itself a gravitating substance; that it is heavier than the other substances, and for that reason occupies a place nearer the earth. Thus you have satisfied yourself that the former proposition is the true one; that the latter is of course false, and the author of it a superficial philosopher.

Or, take an example in moral science. One author lays down the proposition, that all men are depraved, and so prone to evil, that, if left to themselves, they would infallibly sink into utter moral ruin and perdition. Another asserts, that all men are not thus depraved; that many tend to good rather than evil, and that most persons perform more good actions than bad ones. Both propositions cannot be true. Where is the fallacy?

On careful examination, you find that, in every instance where a man is supposed not to be prone to evil, or to perform more good actions than bad ones, either the standard of right moral character is not applied, or the person in question is not left to himself, but is influenced and elevated by a moral culture. In proof of this, you have only to look to those from whom the grace of the gospel is entirely withdrawn, as in pagan lands; where whole nations sink

into idolatry, atheism, brutal sensuality, and every form of sin. Take the moral atmosphere of the gospel from mankind, and how soon do they fall utterly away from all love and knowledge of God and of his righteous law! The first proposition is then supported; the latter falls to the ground, and the author of it is proved to be a superficial theologian.

In this way we might proceed, through the wide range of all that is known or taught in the various departments of human knowledge, and show you that the upright and diligent exercise of your own intellect and judgment, will make the various conflicting opinions and doctrines which you may encounter, serve only to impart acumen and vigour to your intellect, and to establish you in the truth.

The third and last objection to attempting to acquire knowledge in the way proposed, is, that young men devoted to business have not time; and if they had, it would serve to divert their minds from business.

Suppose then that you devote twelve hours from the twenty-four to business. This is probably quite as much as you give to it upon an average through the year. Of the twelve remaining hours, allow eight for sleep; which is the most time any young man should spend in bed, who would enjoy health, long life, and an active mind. Of the four remaining hours, allow two for meals, recreation and miscellaneous matters. Thirty minutes for your dinner, and fifteen each for your breakfast and supper,—which is twice as much time as Franklin occupied at meals,—will give you one whole hour or two half hours each day for recreation, and still leave two hours for acquiring knowledge; including the time spent in lectures or religious services, which should be considered as devoted to intellectual and moral culture. You may thus secure, after all necessary abatements, at least an hour and a half each day to be devoted to close personal study. This amounts in a year to four hundred and sixty-eight hours, which, at the rate of eight hours a day in study, as much as is usually spent thus by professional students, is tantamount to two months, every year, of exclusive devotion to mental discipline and the acquisition of knowledge.

It requires some resolution and firmness to resist the numerous solicitations

of indolence, pleasure, and vanity; to forego much of the reading of light productions, addressed principally to the imagination and the passions, that you may give your mind to the acquisition of solid and valuable knowledge. Look into the history of hundreds now living, and you will see that it may be done, and learn the happy results. They do not appear in a moment, but a few years develop the vast difference between the mind that has disciplined itself to thought and application, and taken hold of the great principles of knowledge, and the mind that has only floated at random upon the surface of things, indolent and self-indulgent, snatching perhaps a sweet morsel here and there, but acquiring no intellectual force.

Nothing can be more erroneous than the idea, that to discipline and expand the mind with general knowledge, unfits a man devoted to business for his particular calling. It is a libel on mercantile, agricultural and mechanical employments, to assert that they are furthered by ignorance, and that the less a man knows beyond them, the better it is for his business. We have heard of merchants who were unwilling to learn anything themselves, and unwilling that their clerks should learn anything, but just how to buy and sell goods, and to keep accounts, lest they should be diverted from the all-important matter of making money; but it is truly lamentable, that such narrow-souled men are intrusted with the direction of youthful minds. Your studies ought not to be carried into the shop or the counting-house, for there is a time and a place exclusively for business. But there is also a time and a place during the twenty-four hours, which every young man sacredly owes to himself, to his Maker, and to the world, to give to the cultivation and enlargement of his mind.

The lapse of a few years will fully convince you, that the mental energy thus obtained is of incalculable value, merely in respect to your temporal interests. A gentleman of large wealth, and of most estimable character and influence, informed me, that when he first became an apprentice, he took lodgings in a boarding-house with eleven other young men. A part of them solicited of the lady who kept the house, the favour of studying in her dining-room a prescribed portion of the evening, and of having the room kept still for

that purpose. The others refused to come into this arrangement; and while their companions were studying, they were out, spending their evenings in theatres, and other places of amusement and dissipation. The difference between the characters and prospects of these two classes gradually increased. Every one of those who wasted their evenings in amusement and pleasure, subsequently failed in business, and finally came to nothing; while all of those who devoted their leisure time to study, succeeded well in business, and, with the exception of one who has since died, they are still living, as distinguished and valuable citizens. The same gentleman who stated this fact to me, said it was only one of numerous similar examples, which had fallen under his observation, in the course of one whole generation and a part of another. It may be laid down, as a general rule, that those young men who redeem time from indolence and pleasure, to discipline their minds and acquire important knowledge, succeed in their callings, and rise to eminence; while those who waste their youthful vigour in dissipating amusements, and secure no other intellectual culture than is afforded by novels, and by miscellaneous and light reading, fail of sufficient mental force to succeed in any important enterprise, and at no distant period find the grave of oblivion.

We have considered the subject with more particular reference to the interests of the present life; but when we consider that the mind is immortal, that the present life is the seed-time for eternity; that all the intellectual culture and knowledge here acquired, if devoted to the right end, will elevate the rank, further the progress, and enhance the blessedness of the soul to all eternity; the subject swells to a magnitude surpassing language to express, or human thoughts to conceive. Come, then, my young friend, you who are yet in the morning of your existence; before whom the boundless future is spread, with all its glorious possibilities of good; look at this subject, in the light of time, and in the light of eternity; and with a rational and firm judgment determine, that, in dependence on the grace of God, you will rise to the honour, glory, and immortality for which you were made.—*Hubbard Winslow.*

SHELLS.—No. II.

ALL shells are composed of particles of carbonate of lime, and of what has the character of an animal substance, resembling in its chemical properties either albumen or gelatine. The mode in which they are united, as well as the nature of the animal portion, differ much in various kinds of shell; and these coverings have, in consequence, been divided into two classes—the membranous and porcellaneous shells.

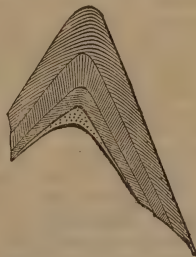
The two substances of which shells are composed, may be separated from each other by an easy chemical experiment. If, for instance, a sufficient quantity of nitric acid, considerably diluted either with water or spirits of wine, is poured on a shell, or the fragment of one, contained in a glass vessel, it will soon exhibit a soft floating substance, constituting the animal part of the shell, and consisting of innumerable net-like membranes, retaining the exact figure of the shell. They satisfactorily prove that this substance is, in fact, an appendage to the body of the animal, or rather a continuation of the tendinous fibres that form the ligaments, by means of which it is fixed to the shell. They also show, that the shell itself owes its hardness to the earthy particles perspired through the vessels of the animal, which gradually incrust the meshes formed by the filaments of which this membranaceous substance is composed.

The eminent naturalist, Reaumur, established two facts in reference to the Mollusca, namely, that the growth of a shell is simply the result of successive additions made to its surface; and also, that the materials forming each layer, so added, are furnished by the organized fleshy substance, which he termed the skin of the animal, but which is now known by the name of the mantle; and not by any vessels or other kind of organization belonging to the shell itself.

To illustrate the process of forming a shell:—If the portion of the shell of a living snail be removed, which can be done without injury to the animal, since it adheres to the flesh only in one point, there is formed, in the course of twenty-four hours, a fine pellicle, resembling a spider's web, which is extended across the vacant space, and becomes the first stratum of the new shell. This web is found, in a few days, to have increased in thickness, by the addition of other layers to its inner surface; and this pro-

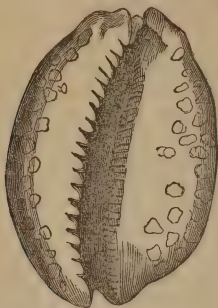
cess goes on, until, in about ten or twelve days, the new portion of shell has acquired nearly the same thickness as that which it has replaced. Its situation, however, is not exactly the same, for it is beneath the level of the adjacent parts of the shell. The fractured edges of the latter remain unaltered, and have evidently no share in the formation of the new shell, of which the materials have been supplied exclusively by the mantle of the animal. This Reaumur proved, by introducing through the opening a piece of leather underneath the broken edges, all round their circumference, so as to lie between the old shell and the mantle: the result was, that no shell was formed on the outside of the leather, while, on the other hand, the inner side was lined with shell. The calcareous matter which exuded from the mantle in this process, is, at first, fluid and glutinous; but it soon hardens into the substance of the shell.

Some shells, called Porcellaneous, have a more uniform and compact texture than those which are membranaceous. The animal matter which unites the carbonate of lime is more equally blended with the earthy particles, to which it appears to act as a cement, binding them strongly together. In shells of this kind the carbonate of lime assumes more or less of a crystalline arrangement; the minute crystals being sometimes in the form of rhombs, and sometimes in that of prisms. In the former case, they are composed of three distinct layers, each of which is formed of very thin plates, marked by oblique lines, which show the direction of the crystalline fibres, so ar-

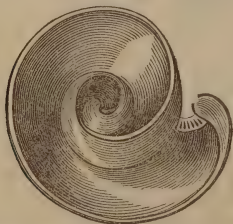


ranged as to give strength to the shell; and what is remarkable, on a principle which has been latterly applied to the building of ships. When the form of the crystals is prismatic, the fibres are short, and the prisms are generally hexagonal. In one shell, brought from

Sumatra, the crystalline appearance was so perfect that some fragments of it were mistaken for a mineral production. In the earliest state of a shell, called the *cypræa*,—known by its lips being rolled inwards, and both of them being toothed,—its substance is very thin, almost colourless, and dull; the mouth is rather wide, the outer lip not rolled inwards, but having a sharp edge, and neither lip toothed. In the second period of growth, the shell begins to approach the general form that marks the genus; the lips are curved inwards, and the teeth become apparent; but the substance is still thin, the colour faint, and the markings indistinct. But in its third and perfect state, the *cypræa* has received an additional coating of testaceous or shelly matter, the pattern appears with its vivid tints and delicate



markings, and the spire, if not entirely hidden, yet scarcely projects out of the body. The animal itself undergoes a considerable change in appearance during its growth; its mantle, at first, is small, but increases with its age, and expands at the sides into two ample wings; and from these is deposited the final layer, which completes the shell. This new plate completely envelops the original shell, giving it a new covering, and disguising its former character. A



transverse section, shows the steps by which these changes have taken place.

THE WAY OF ESCAPE.

We are encompassed every where with guilt; and the avenger of blood pursues that guilt; and we cannot by any means find any power in ourselves, or in any other creatures, to escape it. The soul being seriously convinced of this, God presents unto it the satisfaction and righteousness of Christ; his promise of acceptance of it; and our deliverance from his wrath by it. And now the soul, like a man ready to be drowned, first lays hold of the cable that is thrown out to him, even before it hath leisure to contemplate the goodness of Him that did it. So the condition of our misery teacheth us, first to clasp the promise of mercy and salvation in Christ; and then to consider and contemplate the great mercy and goodness of God, and to entertain it with love and thankfulness. An extreme exigence will give a man some confidence to adventure upon a difficult and unlikely occasion of deliverance; because it is possible his condition may be bettered; it cannot be made worse. "Why sit we here until we die? If we enter into the city, the famine is in the city, and we shall die there; if we sit still here, we die also. Now, therefore, let us fall into the host of the Assyrians; if they save us alive, we shall live; and if they kill us, we shall but die," 2 Kings vii. 4. Even so, even in a way of reason, may the soul debate with itself—I find my condition miserable, and I know not how to avoid it; when I look into myself, I find a guilty and condemning conscience; when I look behind me, I see the avenger of blood pursuing me, and ready to overtake me; when I look before me, I see nothing but a hell to receive me in my flight; when I look upward, I behold an offended and angry God, armed with power and justice, to condemn me. It is true, he is a merciful and bountiful God; but that aggravates my misery. What comfort can the thought of a neglected, an abused mercy add unto me? So that now as my misery is intolerable, so it is inextricable. As I cannot help myself, so I can see nothing without me, but storms, but trouble, and darkness, and dimness, and anguish, Isaiah viii. 22, and a guilt within me, still telling me worse is to come. To prevent my despair, I turn me to the creatures; to friends; to pleasures. But, alas! they have no more taste than the white

of an egg. Like drink in a fever, they increase my torment. In the midst of all this tempest of the soul, the love of God, like the dove to the ark, lets fall an olive branch, a message: a message and promise of life and deliverance; an invitation to peace and salvation. Let any man judge, whether a soul, sensible of its own condition, will not greedily, and even before it hath leisure to contemplate the mercy, lay hold upon it; rest upon it; get unto it. So that the condition of the soul, and the sense of it, doth even drive the heart, in the first act of its illumination, to coming unto Christ, and resting upon him. And then, the soul hath more opportunity to discover, and contemplate, and value the goodness of God; whereby the love of the soul to God is more and more excited and increased.—*Sir M. Hale.*

OLD HUMPHREY ON EARTHLY TRIALS.

I SUPPOSE it is with my neighbours as with myself; for among the endless variety, the countless grades and shades of disposition among mankind, every one breathes the fresh air of heaven with pleasure; every one gazes on the beauties of creation with delight.

The spring and summer breezes always set my heart beating. They make me long to be wandering on the furze-clad common, to linger on the skirt of the coppice, and to gather primroses in the secluded dell. The spirit of the country seems to beckon me abroad, and I cannot help revelling in my fancy among knolly green fields and retired lanes, woods and waterfalls.

When Old Humphrey is once surrounded by elms and gnarled oaks, by the hedges of rural scenes, rich with sward grass, broom, and blackberry brier, chickweed, hayriff, thistle, nettle-top, and dandelion; when the mossy green grass is cool under his feet, and the sunlit clouds are bright above his head, his heart dances for joy. All things around him are then felt indeed to be the gifts of God, and he pants, as the hart after the water brooks, to show forth his thankfulness.

No wonder, when spring and summer bring out the verdure and beauty of shrubs and flowers, when they wake the insect tribes to animated life, and call forth the song of joy from the warbling birds, that the heart of man should join the jubilee of creation. Again I say,

when the breezes of spring and summer blow, the spirit of the country beckons me abroad.

It was at an early hour the other day that I wandered forth, drinking in, as it were, the beauty of the earth and skies. I had turned along a retired path, a sort of bridle-way, but little used, except by the owners of the adjoining fields, and by a band of bird-catchers, who have been long accustomed to lime their twigs, to place their cages, and to spread their nets there. Now and then, a solitary rambler, like myself, may be seen with a book in his hand, seeking the privacy that the place affords, but with these exceptions, the spot is little frequented; no wonder that the green grass flourishes there in abundance.

In this secluded place, an ass and a horse were grazing. The ass, poor thing, was blind, and the horse seemed to be as heavily afflicted. No doubt he was the wreck of what he had once been; he had neighed and snorted, and arched his proud neck, in his time, and rattled over the ground at a rapid rate. He had, doubtless, been petted and patted, and curry-combed, and corned as horses are, when they possess beauty, when their necks are clothed with thunder, and their hoofs are shod with speed; but these things were all over with him. The summer of his life was gone, and his high hips, broken knees, rueful coat, and ribs that might be counted, told a sorrowful tale.

I stood, for some time, looking at him, as he eagerly tore away the fresh grass from the green turf; but it was neither his high hips, his broken knees, his bare ribs, nor his rueful coat, that made me gaze on him with interest. One of his hind legs was sorely diseased. Whether occasioned by ill usage, hard work, or accident, I cannot say; but he could not set his foot to the ground. Even while he was grazing, he kept raising his diseased limb to an unusual height, evidently in a state of suffering; hardly could he limp forward, when he had closely cropped the herbage within his reach; and when he did so, he laid back his ears, showed the white of his eyes, and exposed his fore-teeth, in a way that spoke eloquently of pain. Poor wretch! thought I, but his days are numbered, his trials are almost over. It is but for a time. *It will not be so always.*

It is true that the poor animal had only bodily pain to endure; he had no wants to provide for, no yearnings after life, and no fearful forebodings of death; and therefore, he was mercifully dealt with in the midst of his misery; but the only solid satisfaction that I could fall back upon was what I have already expressed, the reflection, *It will not be so always.*

This little incident set me thinking on the sorrows of the animal creation, and then on the afflictions of mankind. Now, do not wrong me in supposing, that it was in a merely sentimental mood that I mused on human trials. No! a strong spirit of affection for my species, of tender compassion for all that mourn, came over me, and my heart yearned to pour oil and balm into the wounds of the stricken, and to bind up all that were bruised and broken.

Why there should be so much sin and suffering in the world has been a puzzling question to many a wiser head than mine. This is a shadowy page in God's providence, that I have pondered with pain. I have mused and mourned over it, and blurred and blotted it with my tears. There are gracious passages in the word of God, however, that throw some light on this dark subject, yet still it is sometimes awfully mysterious. Still there is much consolation afforded to my mind by the conviction, *It will not be so always.*

Always! no! Time is but a span, a speck; and the gloom of the Christian will break forth in glory. Shadows shall be exchanged for sunshine, pain for pleasure, and temporary grief for eternal joy. If we only believed in the realities of eternity with the same undoubting confidence that we feel as we gaze on the things of sense, then might we smile at calamity, and rejoice in tribulation.

But there is such a thing, I speak feelingly, as being weak in faith. It is well, therefore, to have a few strong points in creation and revelation to fall back upon in seasons of infirmity. When we doubt the power of God, we should gaze on the sun and the moon suspended in the air, and ask if aught but almighty power could hang and uphold them there. And when we doubt the mercy and grace of the Redeemer, we should read over again and again these heart-sustaining texts: "This is a faithful saying, and worthy of all ac-

ception, that Jesus Christ came into the world to save sinners," 1 Tim. i. 15; "He is able also to save them to the uttermost that come unto God by him," Heb. vii. 25.

Far be it from me to draw away the heart of any Christian mourner from the blessed promises contained in the Holy Scriptures; these ought to be meat and drink, a refreshing draught and a sustaining cordial to us all; but sometimes a simple, short observation, though lisped by a stammering tongue, or written by a very indifferent pen, may be of service. If then you happen to be afflicted, perhaps you will dwell with me for a moment on the words, *It will not be so always.*

There are very few of God's people who have not some open or some secret affliction; for the words: "In the world ye shall have tribulation," John xvi. 33, are not a figure of speech, but a literal truth. A man may have hidden troubles, as well as hidden treasures, in his strong box, that no one knows of but himself; and this may be your case. We hide our infirmities and our afflictions oftentimes more jealously than our money bags.

Are they not cheering words to say to the blind, "Cheer up, fellow-pilgrim, for your eyes are about to be opened?" To the lame: "Take courage, the use of your limbs will be soon restored, and you will be enabled to run without weariness, and to walk without fainting!" Are they not enough to make the one and the other sing for joy? Why, then, should not you sing? "The time is short;" "the kingdom of heaven is at hand;" you are in trial, but, *It will not be so always.*

Whether you are afflicted in the sight or the sinews, the head or the heels; whether you are groping about, like the poor ass; or hobbling about, like the poor horse, no matter. Whatever may be your troubles, whether afflicted in mind, body, or estate, take courage. I say, *It will not be so always.*

What are our troubles of yesterday to us to-day? And what will those of to-day be to us to-morrow? But you may think that your troubles are peculiar. Well, what of that? God's people are a peculiar people, and have peculiar support; no wonder that their troubles should be peculiar also. Dwell not upon them, but look forward to peculiar joys.

These light afflictions—heavy though we think them—spring not forth of the dust. They are weighed in the balance, and are not a scruple too light, or too heavy for your case. Whether for a moment—

“The heart is mournful, or with rapture glows,
Love holds the scale that makes our joys and woes.”

Bear then your afflictions patiently, submissively, acquiescently; *It will not be so always.*

If we did but know what our afflictions defend us from, as well as we know what they bring upon us, we should be more reconciled to have them for companions. They may give us pain, and yet be so blest as to afford us peace. They may give a gloom to time, but a glory to eternity. I have some friends now, whose afflictions I put into my prayers; not that they may be removed, for that might or might not be a blessing; but that they may be among the “all things” that work together for the good of God’s people.

When I began these homely observations, I hoped to make them better worth your acceptance, but I have found before now, to my mortification, that strong sympathy has oftentimes none but very weak language at its command. You must give me credit for my thoughts being better than my words; and taking what comfort you can under your afflictions from the remembrance, that *It will not be so always*, look steadily, hopefully, and trustfully to the God of all consolation, who hath said, “Even to your old age I am he; and even to hoary hairs, I will carry you,” Isa. xlv. 3, 4. “I will never leave thee, nor forsake thee,” Heb. xiii. 5.

SAP OF PLANTS.

THE progress of discovery, in the science of botany, is very strikingly illustrated by some late investigations of M. Biot, of Paris, who has applied polarized light to detect the nature of the sap of plants, in cases where even chemical analysis was at fault. It may not be amiss, before mentioning M. Biot’s investigations, to say a few words on polarized light itself, as the means which he employs.

About a hundred and fifty years ago, the Dutch philosopher, Huygens, discovered a remarkable property of the rays of light, transmitted through Iceland

spar; a property which led Sir Isaac Newton to suppose each ray to have four sides, or quarters, causing it to be disposed in a particular manner. In 1808, while M. Malus was viewing, with a doubly-refracting prism, a fine sunset reflected from the palace of the Luxembourg, at Paris, on turning the prism slowly round, he was surprised to see a very great difference in the intensity of the two images, alternately changing from brightness to obscurity, as he turned the prism round.

From that period several eminent philosophers have studied these phenomena of polarized light, as it is termed, and have discovered, as Sir J. Herschel remarks, facts so singular and various, that to one who has studied light only under its ordinary relations, it is like entering into a new world, so splendid, as to render it one of the most delightful branches of experimental inquiry; and so fertile in the views it lays open of the constitution of natural bodies, that the student of the works of creative wisdom ought, by all means, to make himself acquainted therewith.

One singular property of this polarized light is, that when reflected from a surface, the ray is sometimes observed to go to the right, sometimes to the left; and sometimes more, and sometimes less decidedly, on account of the nature of the substance from which it is reflected.

It is this property of polarized light which M. Biot has taken advantage of, to discover not only the constituents of the sap, but also of grain and other important parts of plants as shall now be stated.

We are told in most of the elementary works on botany, that the chief food of plants consists of carbonic acid gas diffused in water, together with potass; and some other matters apparently not very well understood. M. Lassaigne, of Alfort, in order to elucidate this point, devised the ingenious experiment of analysing seeds before and after germinating, and in this way arrived at one method of proof of the common statement; but this did not succeed so satisfactorily as could have been wished, and M. Biot undertook his new experiments.

He first proposed to himself to ascertain by means of the circular polarization of light, the presence of the principles of gum or sugar in the sap of trees, and then to trace these as connected with the

nourishment of the young buds in spring. Some of the facts which he thus discovered are very remarkable.

Early in February, he pierced with holes, sloping slightly downwards, several species of trees, such as the almond, the birch, the hornbeam, the maple, the ash, the lilac, the mulberry, the walnut, the elm, the poplar, the plane, the willow, the elder, the sycamore, the lime, and the vine; fitting into each hole a dry reed, with the inserted end cut sloping, and scarcely penetrating deeper than the bark. The other end of the reed was inserted into the mouth of a small phial, suspended by a bit of wire, and coated with a composition of oil and wax, so that it could not mix with water. In these phials, the flowing sap was collected, and when any evaporation of the watery portion occurred, from the temperature of the tree being higher than that of the air, it was condensed within the phial. Not contented with experimenting on one tree of a species, he selected several of the same sort, in various positions and exposures; and he also fixed at various heights from the ground a considerable number of phials on the same tree.

He discovered, by these means, that in the birch, the sugar contained in the sap is not cane, but grape sugar; and also, that the sap flows progressively from the root to the summit, the flow varying with exterior physical causes, by which it is modified. In February, the walnut, the sycamore, and the maple, did not show any flow of sap; and he took advantage of their state of rest to examine their interior parts, by having a number of trees of these species purposely cut down. It appeared singular, that the interior parts of the birch trees were destitute of moisture, and often quite dry; while the walnut and sycamore trees were distinctly soaked with moisture, from the inner surface of the bark to near the central pith. Moreover, upon the latter being pressed, the moisture could be squeezed out, and the oozing was most distinct between each of the circles constituting the annual rings of the wood;—facts which were observed before any sap had begun to flow to the phials, except in the birch; and proving, that the chief channels of the sap are between the annual rings.

About the 11th of February, the walnut trees began to give a few drops

in the phials, which were placed about seven inches from the ground, though not in those at a greater height. The sap which was thus collected, was not fermentable, like sugar of grapes, as in the case of the birch, but crystallizable, like cane sugar; for on being tried with polarized light, it gave a strong polarization towards the right, while that of the birch is equally strong towards the left;—a very remarkable fact. The flow of sap into the phial in question, continued abundant for several days, but gradually diminished, and about the end of February ceased entirely. In another phial, about three feet from the ground, a small quantity of sap was collected; but eighteen other phials, at various heights on the same tree, remained quite dry.

It was not a little remarkable, that the walnut tree just mentioned was known to be rather late; while another very large one, a hundred paces distant, known to be fifteen days earlier, gave no trace of sap at all, though no fewer than fifteen phials had been attached to it by M. Biot. He discovered, at length, that his experiment had been begun too late in the season, the spring flow of the sap being then over; or, in other words, that all the sap flowing from the roots was evaporated from the buds and bark. This discovery was made and proved by the occurrence of cold weather checking the evaporation. The thermometer fell one degree below zero, and a sharp dry frost followed, when the maple, the sycamore, and the walnut trees began to flow again, and continued till the middle of March.

The experiments of this ingenious inquirer distinctly prove, that the sap near the root is less dense and less rich in sugar, than that higher up in the trunk and branches; a fact also mentioned by the late distinguished president of the Horticultural Society, but explained by him to arise from the sap in spring mingling with the condensed nutriment deposited in the roots the preceding autumn. The French philosopher, on the contrary, believes, that it arises from the watery portion of the sap being, as it rises, either diffused through the substance of the plant, or evaporated through the bark, or both. M. Biot proved, that though the sap collected in the phials, at different heights from the same tree, was more dense and rich the higher it was procured, yet the portions of wood and bark containing the sap,

gave exactly the same proportion of sugar and nutritive matter, at all heights, however varied.

It was farther discovered by M. Biot, that the swelling and opening buds, at least of the lilac, have the power of decomposing the sugar of the sap, and of appropriating the carbon contained in it; in the same way as the seed-leaves of corn decompose the fecula contained in the grain, as shall presently be stated.

Finding that the slow growth of trees was not so well adapted to some of his experiments as the quicker growth of annual plants, M. Biot made choice of wheat and rye for observation. It has been long known, that in the process of germination, the farina of grain is changed into sugar, which nourishes the young plant, till it can depend upon its roots and leaves, for obtaining it from other sources: what these sources are, however, and how they are changed and appropriated, had not been experimented upon till M. Biot took up the matter.

On the 3rd of May, he made his first observations on plants of rye already in the ear, but not yet in bloom. He examined, by means of polarized light, the materials of the roots, the stems, the leaves, and the ears. The matter of the roots was found to give an exceedingly feeble rotation towards the left, which might be caused by the presence of the moisture of cane and grape sugar neutralizing the right and left polarization. The stem indicated a proportion of grape sugar turning the light to the left, and of cane sugar turning it to the right, as well as of gummy matter, turning it to the left with a force similar to gum. The 15th of May, while the ear was still far from being in bloom, the stem indicated a mixture of the same three substances, but with a considerably larger proportion of cane sugar, proved by polarization towards the right.

After blooming, the composition of the ear was found to be very different. On the 15th of June, the young grains of rye, taken from the ear, already contained globules of fecula, along with some sugar of starch, but no trace of either cane or grape sugar. M. Biot concludes, that the cane sugar, the grape sugar, and the gum, which are contained in the sap of the stems and leaves of rye, are changed in their nature on passing the neck of the ear, supplying materials for nourishing the young grain.

On the 19th of May, M. Biot took young plants of wheat, and treated them similarly to those of rye, when he found, as in rye, the three substances of cane sugar, grape sugar, and gum. So soon as the following day, the cane sugar decidedly predominated. On the 4th of June, when the plants began to bloom, the sap of the stem indicated a polarization of light towards the left, proving that the cane sugar, which had previously predominated, was now greatly diminished in the stem.

In the leaves the case was very different; for though they contained the three substances, the cane sugar was proportionably much greater than the grape sugar, contrary to what was found in the stem; while the gummy matter, so far from turning the polarized light to the left, turned it to the right, proving that it was fecular.

The leaves of wheat continue to preserve the same composition till they begin to grow yellow, and wither; an effect which uniformly commences at the top of the leaf, and on the leaf nearest the root. After this, scarcely a trace of sugar or other nutritious matter can be found in them; all, it would appear, having gradually passed into the stem to nourish the ear.

Accordingly, in wheat, as in rye, the base of the stems can derive nourishment, partly from the leaves, and partly from the soil; and the summit of the stem can draw nourishment from its own leaves, as well as draw out the sap from below; but the ear, when it issues from the sheath, appears to exercise on the proper juices of the top of the plant a powerful absorption, causing them to rise rapidly, in proportion as they are furnished by the base of the stem.

In proportion, therefore, as the fecundated ear increases in magnitude, the leaves near the root begin to grow yellow and dry, in consequence of the stem drawing from them the nutritious materials of sugar and gum which they contain. As the growth advances, the base of the stem becomes yellow and dry in its turn, while the upper part remains green, and continues to nourish the ear.

Light was the first thing created; but it still seems to be one of the things least understood in human philosophy, and has exercised the profoundest minds to investigate its properties. Our knowledge of it therefore advances not beyond

imperfect glimpses. The polarization of light is one of them, and it is hoped that the application of it, detailed in the above experiments by M. Biot, may excite others to study this interesting portion of the works of God. J. R.

THE ROSE-BED OF BENGAL.

GHAZIPORE stands upon the north bank of the Ganges, about seventy miles, by water, below Benares. It is not a very extensive town, but it is justly celebrated as the Gul-istan, the rose-bed, of Bengal. In the spring of the year, an extent of miles around the town presents to the eye a continued garden of roses, than which nothing can be more beautiful and fragrant. The sight is perfectly dazzling; the plain, as far as the eye can reach, extending in the same bespangled carpet of red and green. The breezes, too, are loaded with the sweet odour which is wafted far across the river Ganges. The flower is cultivated thus extensively for the manufacture of rose-water; that of Ghazipore being justly esteemed as surpassing in excellence every production of the sort. Whether or not this may be attributable to the superiority of the flowers, or the process of distillation, I cannot say; but as the roses did not appear to me to possess greater fragrance than others of their class, I should rather refer it to the latter cause; unless, indeed, it be that the wonderful abundance of the material enables them to be more lavish in its decoction than is elsewhere possible. It is no less cheap than excellent: a gallon of the most delicious may be purchased for seven or eight shillings. They do not, however, understand at Ghazipore the art of distilling the *atr* of roses in the same perfection as the Persians. The spurious compound which they endeavour to palm upon the traveller is weak, and possesses a sickly, disagreeable odour foreign to the rose; but the purchaser is often deceived by a little of the true *atr* being rubbed about the stopper and neck of the bottle. The prices demanded for this miserable imitation are exorbitant; the explanation of which I received from one of the vendors: he assured me, that long experience had taught him, that it was part of the character of the English to despise every thing cheap, and to consider any thing choice and

excellent which was extravagantly priced.—*Martin.*

SOLAR SYSTEM.

To afford the "mind's eye" clear notions of the movements made by the planets and their moons, a method has been suggested by that great practical astronomer, Sir John Herschel, upon the following principle:—Conceive the sun represented by a globe two feet in diameter: at eighty-two feet distance, put down a grain of mustard seed, and you have the size and place of the planet Mercury, that bright silvery point which is generally enveloped in the solar rays. At the distance of one hundred and forty-two feet, put down a pea; it will be the similitude of Venus, our resplendent morning and evening star. Two hundred and fifteen feet from the central globe place another pea, just perceptibly larger; that is man's world, once the centre of the universe. Mars is smaller still, a good pin's head being his proper representative, at the distance of three hundred and thirty-seven feet. The four small planets, Vesta, Juno, Ceres, and Pallas, seem as mere particles of dust, about five hundred feet from the sun; Jupiter as a middle-sized orange, distant about a quarter of a mile; Saturn, with his ring, a lesser orange, at the remoteness of two-fifths of a mile; and the far Uranus dwindled into a cherry, moving round a circle which has three quarters of a mile for its radius.

BAXTER'S SAINTS' REST.

At a late meeting of the corporate body of Kidderminster, the large corporation chest was opened, and the ancient treasures placed on the table. Among these relics was a very curious drinking cup, in imitation of gold, and very richly ornamented; several very ancient deeds, relating to charities, most of which are not now in existence, and on the title-page of a very old edition of "Baxter's Saints' Rest," in his own hand-writing, is the following:—"This book being devoted, as to the service of the church in general, so to the church at Kidderminster, the author desires that this book may still be kept in the custody of the High Bayliffe, and entreateth them carefully to read and practice it, and beseecheth the Lord to blesse it to their true reformation, consolation, and salvation. Rich. Baxter." — *Gentleman's Magazine.*



Edward VI. showing his reverence for the Bible.

EDWARD VI.

THE reign of Edward VI., though short, was very important. The quiet policy of those who at first conducted the administration, gave stability to the important changes which had been begun, and carried them onwards to a more perfect state. As Edward was hardly ten years old when he came to the throne, and died before he was sixteen, the government, during his reign, rested upon the counsellors around him, who appear, for the most part, to have been able and well-advised men: their measures were in accordance with the principles implanted in the mind of the youthful monarch by his early instructors.

Henry VIII. died January 28, 1547, when his son succeeded to the throne. One good trait in Henry's character, was the care bestowed upon his children. The youthful Edward had been taken from the nursery four years previous to his father's death, when he was committed to the care of Dr. Cox and Sir John Cheke, both of them well-skilled in the best learning of that age. Under these tutors, he made rapid progress, as appears from some of his early writings, the originals of which still remain. Before his father's death, he wrote Latin letters, and showed great eagerness for study. Three years later, Ascham describes him as fully master of Latin, able both to speak and write in that language. He was reading Aristotle in Greek. Ascham says, and the account does not seem to be exaggerated, "Our king, in talent, industry, steadiness, erudition, greatly surpasses his age, and

the belief of other persons." But, what was far more important, he was instructed in the truths of religion, he studied and revered the holy Scriptures. By his contemporaries, and by every candid mind in later days, Edward has been regarded as the British Josiah.

The late king appointed sixteen individuals to act as executors of his will. They were to conduct the government during Edward's minority. The list included men attached both to the old and new opinions; but the more bigoted of the Romanists were not among them. Cranmer, and Tostall, bishop of Durham, an amiable, though not a thoroughly enlightened man, were the principal ecclesiastics. From these councillors, the earl of Hertford, the eldest maternal uncle of the king, was chosen to preside, and to act as the protector. He was created duke of Somerset, upon a statement being made, that such was the intention of the late king. His brother received the title of lord Seymour, of Sudley. Several others were raised to the peerage, while some declined the honour as beyond their means to support.

The funeral of the late king, at Windsor, exhibited a pompous ceremonial. It was speedily followed by the coronation of the young Edward, the ceremony being arranged by Cranmer, so as to omit some of the popish rites formerly observed. The king, young as he was, manifested the right spirit with which he was imbued. On seeing three swords of state prepared, he desired that a Bible should be brought and carried in the procession, calling it the sword of the

Spirit, and saying, "He that rules without it, is not to be called God's minister or a king." Cranmer, in the sermon on this occasion, solemnly charged the royal child to go forward in the work of reformation. This was the desire of the prelate himself, now more fully enlightened in his own mind, and freed from the caprices of Henry VIII. The lord Protector also entered into these views. In the following affecting prayer, preserved by Strype, he sought direction from Him, by whom alone kings reign, and princes are enabled to decree justice. "I am, by appointment, thy minister for thy king, a shepherd for thy people, a sword-bearer for thy justice: prosper the king, save thy people, direct thy justice. I am ready, Lord, to do that thou commandest; command that thou wilt. Remember, O God, thine old mercies; remember thy benefits showed heretofore. Remember, Lord, me thy servant, and make me worthy to ask. Teach me what to ask, and then give me what I ask. None other I seek to, Lord, but thee, because none other can give it me."

The chancellor, Wriothesly, newly created earl of Southampton, was the leader of the Romish party in the council. Desirous to take an active part in politics, he delegated a part of his judicial authority to others, an illegal proceeding, of which his colleagues availed themselves to deprive him of his office. This success encouraged the Protector to gratify his ambition, by obtaining still farther powers, which rendered him nearly independent of the council. But a spirit of mercy and conciliation influenced his proceedings. A general pardon was proclaimed, which freed all who were suffering under the act of six articles, and allowed many exiles to return to their homes and families.

The foreign policy of England was changed. The main object, during the late king's reign, had been to interfere between the emperor and the king of France, so as to prevent either from decidedly prevailing over the other; but especially to prevent the ascendancy of France, the ancient rival of England, although Henry was often placed on ill terms with the emperor. Hertford saw the importance of peace to England, that more attention might be given to the state affairs at home. Cranmer fully coincided; upon principle he was opposed to war, thereby exhibiting a

wide difference from the martial spirit of many Romish ecclesiastics; and he wished to take the opportunity of establishing the Reformation in England. Thus the interference of England with the continental politics was stopped, though strife and intrigue continued abroad. Henry II., the successor to the French throne, showed himself to be an ambitious restless spirit; he was hailed with much joy by the pope, and encouraged to disturb Europe.

The young king continued his useful occupations; he lived on good terms with his sisters, especially with Elizabeth, to whom he manifested the warmest affection, calling her his "sweet sister Temperance." Their minds and pursuits were congenial in many respects. But the studies of Edward were not confined to literature. A large number of papers exist, which show his anxiety to be informed upon subjects connected with the welfare of his realm, questions of polity, connected not merely with the art of war and kingly power—matters then usually studied by monarchs; but also with trade, with the administration of the laws, and other subjects really the most important for a state.

The exception to this peaceful policy was with regard to Scotland. The Protector desired to secure the marriage between their youthful queen Mary and king Edward, when they should arrive at a suitable age, as contemplated by the late king, and to prevent her alliance with France. He sought to enforce this by arms, and invaded Scotland with a powerful army. The Scots were defeated at Pinkey, near Edinburgh, on September 10, 1547, by Somerset, who did not fully follow up the victory, partly from a desire to avoid exasperating the Scottish nation, and also from the necessity of counteracting the ambitious intrigues of his own brother, Sudley, the lord admiral. That turbulent spirit sought an alliance with the princess Elizabeth, when only fourteen. Being disappointed by the interference of the council, he prevailed upon Catherine Parr, the widowed queen of Henry VIII., to marry him very soon after the king's death. Her conduct in this haste was blamable, though, in many respects, the situation of an unprotected female of rank, was such as to render an alliance with one possessed of power desirable. The question of precedence, however, between her and the duchess of Somers-

set, stirred up strife. Some consider the quarrel between the Protector and his brother to have been aggravated, if not caused, by the animosities of their wives, and Catherine paid dearly for her imprudence. She died little more than a year after her marriage, having recently given birth to a daughter. There appears full reason to believe that her end was hastened by the unkindness of Sudley, if not by darker proceedings. Being at liberty to form a new union, Sudley sought the hand of lady Jane Grey, who was next in succession to the crown after the king's sisters: being disappointed in this plan, he made another attempt to gain the princess Elizabeth. Again disappointed, he sought to render the king dissatisfied with those about him, and to lead him to habits of expense, the sure road to profligacy. His unquiet spirit led him to other violent measures, all tending to subvert the government, though without any precise prospect of advantageous results to himself. He evidently planned some sort of insurrection, and desired the superintendent of the mint at Bristol to prepare him a large sum of money, even base coin. Such proceedings led to his arrest and committal to the Tower. He was tried and condemned as a traitor; and though he was the king's uncle, and brother to the Protector, they joined the council in directing his execution. The proceedings of those times exhibit indifference to the ties of relationship, and recklessness in the shedding of blood, which shows the Satanic influence under which the nations had long groaned. This evil-minded man followed his wife to the tomb within six months after her decease. His deeds show of what manner of spirit he was. She has left more pleasing memorials in her prayers, and her little work, "The Lamentation of a Sinner;" one extract from the latter will show that if there was evil, there was also good in that day, among those of the highest rank. "If I should hope, by mine own strength and power, to come out of this maze of iniquity and wickedness, wherein I have walked so long, I should be deceived. For I am so ignorant, blind, weak, and feeble, that I cannot bring myself out of this entangled and wayward maze; but the more I seek means and ways to wind myself out, the more I am wrapped and tangled therein. Therefore, I will first require and pray the Lord to give me his Holy

Spirit, to teach me to avow, that Christ is the Saviour of the world, and to utter these words, 'the Lord Jesus;' and finally to help mine infirmities, and to intercede or entreat for me."

The Protector had reason to lament the fall of his brother: from that time his own course was a troubled one, till he also fell a victim to political intrigues. God frequently marks such conduct by results which cannot be mistaken. Indeed, the disagreement between the brothers, which led to the execution of the admiral, seems to have been fomented by the French rulers, to cause, if possible, such civil commotions in England as might aid their domination in Scotland. For one brother thus to destroy the other, was not unaptly compared by a contemporary historian, to the right hand cutting off the left.

We may now return to a more pleasing subject, the progress of the Reformation. To this Cranmer had directed his active energies with the full concurrence of the Protector. The people, in general, desired to be delivered from many of the remains of popery, though, as in every religious reformation, from the first establishment of Christianity, the inhabitants of towns were far advanced before the villagers and people of secluded districts. Injunctions were sent forth, early in this reign, ordering that certain superstitious observances should be discontinued; that the clergy should preach the truths of Scripture; and that the English Bible and the paraphrase of Erasmus, should be placed in every church, for the people to read. Those of the clergy who were unable to preach, were furnished with that inestimable treasure, the book of Homilies, to read to their congregations. In this work, set forth by authority, and confirmed by subsequent declarations, we have the best exposition of the doctrines taught by the reformers of the English church. There is no propriety in arguing upon an unconnected word or phrase in any of her services, while we have this book to resort to, for full explanations, in language intelligible even to the plain unlettered reader. But we are too apt to forget the importance and value of the Homilies, while those opposed to the true interests of the church of Christ have studiously endeavoured to cast them into the shade.

Bishop Gardiner soon showed his sense of the importance of these Homilies. He decidedly objected to them,

especially to the Homily on Salvation, which is generally attributed to Cranmer himself. He was abetted by many who were attached to the old religion, as they called it; and he conducted the opposition in the same turbulent spirit he had previously manifested. It is to be regretted that Cranmer and his associates met this conduct with too much of the spirit they had imbibed in the school of popery. Although well assured that they were engaged in the cause of Christ, and that the truth must prevail, they could not be satisfied to leave the matter in the hands of their Lord and Master. They saw, on the one hand, turbulent men endeavouring to restore error by human devices; they saw, on the other hand, some over-zealous spirits, excited by these efforts to measures also injurious to the cause of reformation and truth. Instead of leaving the due state of matters to be brought about by the course of events under the all-wise hand of Providence, they sought to enforce uniformity by legal enactments, and the interference of temporal power. Thus, though they did not adopt the bloody and violent course of Romish policy, they enabled Gardiner and Bonner to assume the aspect of sufferers for conscience' sake, when they were notoriously devoid of all conscientious feelings whatever. Gardiner played his game the best for his own purposes. He disputed about theological topics, while he really sought to excite turbulence, using the coarsest and most irreverent phraseology, language resembling the expressions of infidels, showing that he had no real regard for sacred things. He proceeded, till he was imprisoned and deprived of his bishopric, shut up in the Tower, and forbidden the use of his books and writing materials. Foxe has faithfully recorded Gardiner's arguments: though we must condemn his theological views, we must also regret the sufferings inflicted on him; but, in the next reign, he visited them on his opponents with far more intense severities.

Bonner can hardly be called a sufferer for religion; though soon released, his turbulent seditious conduct caused him to be again imprisoned. We find him writing from his prison in the Marshalsea to his friends for pears and puddings, concluding with the following words, which are too characteristic of the man to be omitted: "If amongst you I have no puddings, then must I say, as Messer

our priest of the hospital said to his mad horse in our last journey to Ostia, "To the devil, to the devil; to all the devils with you." The reader may be surprised at such a quotation being introduced here; but it prepares us for the conduct of the wretched being who was foremost in the persecutions of the following reign. He dates his letter, "On the Feast of All Souls." Some in our days are affecting this style; let them see who was among the last characters in the church of England that used it!

Other and more laudable proceedings were carried forward by Cranmer and his associates. Commissioners, attended by able preachers, were sent to visit the different parts of England. The act of six articles, and two statutes against the Lollards, were repealed. Private masses were forbidden; the leading falsehood, the great source of power and profit to the church of Rome, expiatory sacrifice for the dead, was thus done away. The term "sacrament of the altar," was discountenanced as a common, but unscriptural name for the Lord's Supper, of which all the congregation were now to partake. This was important, for by use of the term "altar," the notion of a sacrifice, as taught by the church of Rome in its mass service, was kept up, with all the unscriptural views respecting the priesthood and idolatries of popery. "The Lord's table," is the scriptural term, 1 Cor. x. 21; this has been adopted by the reformed church, and it involves considerations of importance.

Bonner was displaced from his see; he had acknowledged, with other prelates, that they held their appointments at the royal pleasure. Ridley was appointed his successor. A large part of the revenues of this see was appropriated by the courtiers, but Ridley was charitable and liberal to the utmost of his power: in particular, he supported Bonner's mother and sister, placing the former at the head of his table, even when visitors of rank were present. Bonner, as we shall see afterwards, returned evil for good.

Latimer, and other able divines, were sent forth to preach through the kingdom; superstitious processions were forbidden; images were to be removed; texts of Scripture were inscribed upon the church walls. The Latin mass services, and prayers in an unknown tongue, were done away, and an English service was

set forth in 1549, very nearly resembling the present Liturgy as it now stands; much of it being collected from Scripture, and the rest chiefly from ancient liturgies, retaining, however, some forms and expressions introduced by the church of Rome in the days of error, though her worst corruptions were wholly expunged. One important feature in the Reformation, was the encouragement given to preaching the gospel. The importance of listening to "God's word opened," instead of trusting to the services of others, or to the observance of superstitious ceremonials, was strongly urged by all the leading reformers. There was a pulpit, or preaching place, in the palace garden, at Whitehall, where Latimer and others regularly set forth the word of God, on Sundays and holidays, to the king and the Protector, while many of all ranks resorted thither. Several of Latimer's sermons before the king are preserved; they present a singular mixture of anecdote, forcible argument, and clear doctrinal statement, in language, which to our ears frequently appears uncouth, but which was well calculated to make an impression on the hearers of that day. Small books, setting forth the doctrines of truth, were extensively circulated.

Cranmer had considerable intercourse with the foreign reformers, the effects of which we shall have to notice presently. The free use of the English Scriptures was permitted; thirty-four editions of the whole Bible, or New Testament in English were printed during this short reign. The marriage of priests was declared lawful. Abstinence from flesh during Lent, and the use of fish for food at that season, were enjoined, but not from obedience to the church of Rome; it was from a mistaken fear of a scarcity of flesh meat, and in order to encourage the fisheries.

The beneficial change was not effected without considerable opposition on the part of many inferior ecclesiastics, as well as the bishops already noticed. They were, for the most part, treated with lenity; of this, Underhill, one of the king's guards, complained, when Cranmer discharged the vicar of Stepney, who had silenced the licensed preachers. He said, "If ever it come to their turn, they will show you no such favour." Cranmer replied, "If God so provides, we must abide it." Pole was still active in exciting rebellion in Eng-

land; he became more eager on being disappointed in his plan of procuring himself to be recalled and employed in the government under Edward. Various causes conspired to excite popular discontent. There had been insurrections in Germany; some of the agents being driven from thence, took refuge in England, disseminating wild notions of levelling the ranks of society. There was also, at this time, considerable pressure on the lower classes throughout Europe. The influx of gold and silver from America, the dissolution of monasteries, the extension of trade, and the increase of arts and manufactures, all tended to a general rise in the prices of commodities, especially articles of food. The woollen trade also, by rendering the growth of wool, for a time, more profitable than the raising of corn, caused large tracts of tillage to be converted into sheep walks. Many were now acquiring wealth from new sources, and with unaccustomed rapidity; but with the evil spirit of covetousness, innate in the hearts of men, they sought their own enjoyment, or accumulated property; and the less successful mass of the people were heavily affected by the change. While villains or serfs to the soil, the lowest classes were in effect slaves; but they had a maintenance provided, such as it was, except in times of famine, when they perished by hundreds. When the feudal and monastic systems were done away, the lower classes were liberated from bondage, they became free labourers; the industrious and enterprising were no longer kept down from rising in civil society. The history of this century affords many examples of such elevations. But that dissolution of feudal bonds which permitted free labourers to arise, also left the indolent and unfortunate in a more helpless state of pauperism. Into that degraded suffering state those must fall, who, from improvidence, or other causes, do not procure a sufficiency for their support. As yet, no public provision had been made for this class, who from the alterations above mentioned, engaged public attention more than formerly. Any rapid transition in a country is productive of considerable suffering; this naturally excites complaint, which the evil-disposed and weak-minded raise into undue clamour, the one seeking to gain their selfish ends, the other apprehensive of they know not what; while the points upon which they come

into collision are not so much the real causes of the grievance, as those which happen to excite party discussions and popular attention at the time.

Pole and his abettors availed themselves of the general uneasiness, which was manifested by public actions. In various places, the populace broke down the fences of new inclosures, and hindered other measures of improvement, which the ignorance of that age accounted injurious to the state, while in reality they benefited the country at large. More violent proceedings followed. On Whit-Monday, 1549, the people in Cornwall and Devonshire arose in revolt. Ten thousand men were soon assembled, and moved forward. The opinions of the band of rebels were shown by carrying the Romish host, or sacramental bread at the head of their forces, with the other popish accompaniments of crosses, consecrated candlesticks, banners, and holy water. Their sentiments were declared in their list of grievances, among which they reckoned the doing away of the mass. The real origin of this movement was farther declared by their demand that Pole should be recalled from his banishment and made one of the council. A number of the old monks and friars engaged in this insurrection. They had found all their anticipations of disadvantageous results to themselves from the progress of gospel light, realized. Among other things, the rebels demanded that the English Bible should be suppressed, and the Latin service restored.

The progress of the rebels was stayed by the inhabitants of Exeter, who defended their city, under great sufferings, till the siege was raised by the royal forces, August 6. The insurgents were then dispersed, though not without considerable difficulty.

In Norfolk, the insurrection was not less formidable. Headed by a tanner, named Ket, a man of property, the insurgents took possession of Norwich. There the proceedings assumed a more political form than in the west; the leader openly urging forward revolutionary measures, that the gentry should be put down, and the people raised to rule. But by the latter end of August, the insurrection was quelled, and the leader taken and executed. Smaller risings in Yorkshire, Wiltshire, and other counties were more easily suppressed.

The sermons of Latimer, the tracts of

Becon, the answers of Cranmer to the manifesto of the western rebels, all give considerable information as to the state of both religious and civil affairs which led to these troubles. The graphic language of Latimer in particular, shows that the agricultural population were suffering from those changes which result from advance in civilization. These results are deplorable, but can never be stopped; the truly wise policy is to give a suitable direction to the progress of things, and to counteract sufferings by bringing forward the new sources of happiness and successful employment. This truth is now acknowledged, although by no means sufficiently acted upon; but in the times under our notice, it was neither acknowledged nor acted upon. The measures recommended by Latimer were impracticable, unless where the evil spirit of covetousness is taken from the heart of man, by a new birth unto righteousness, leading to new practices from new principles. The evil chiefly complained of by Becon, has been complained of in all ages; he describes the hard dealings of the covetous with those beneath them. "Then there is another sort which glory in the title of gentlemen also, and they are such as think all nobility consists in the abundance of worldly goods, in wearing of golden chains and costly apparel, in having fair houses and pleasant gardens. And to set forth this, they poll, they pill, they wake, they rake, they sweat, they fret, they grip, they nip, they face, they brase, they semble, they dissemble, yea, they move every stone, as they say, to maintain and set forth their ignoble nobility, not caring how they come by it, so they have it. All is fish that comes to the net; it is good to be taken. These study not as the true gentlemen do, to profit many, to do good to the country, to maintain the poor, to relieve the succourless, to nourish the weak, to cherish their needy tenants; neither seek they the good of the commonwealth, but their own private advantage." The plans of Edward and his counsellors, tended only to keep things in a state of uncertainty and suffering, by delaying that onward progress which alone could extricate the sufferers. Thus the laws then enacted, though useful in soothing popular prejudices, were not calculated to remove the evil complained of, or really to benefit the nation. But what shall be said of the popish faction who sought to forward their own evil ends, by foment-

ing these revolutionary proceedings? It was not the only time when the spirit of despotism, innate in popery, has united with the wildest views of change, and sought to disorganize society.

The papers of the youthful king evince his attention to matters of public moment, in connexion with foreign states as well as domestic polity, but there were not many events of this description in his reign. The favourite project of Somerset, the alliance by marriage with the Scottish queen, had been defeated, probably by the earnestness with which he sought its accomplishment. The Scots, blind to the advantages which would ensue to both nations from the union of the kingdoms, and exasperated by Somerset's invasions, listened to the overtures of France, accepted aid from that nation, and gave up their queen to be carried there and educated as a wife for the French king. She arrived in France in August 1548. The interference with the affairs of Scotland led to direct hostilities with France, which were not then important in their results. Eventually this marriage, however flattering, proved the beginning of sorrows to Mary; a close alliance with France unavoidably placed Scotland in collision with England.

The proceedings of the Papists led the Protestant party to try stronger measures of restraint, and in some degree of coercion. The king's sister Mary, who resided in Norfolk, was suspected of having encouraged the rebels. No proof of her participation could be found, but the council required her to discontinue the celebration of mass in her family. She resisted, and by the interference of the emperor, procured that indulgence which she afterwards refused to her Protestant subjects. But the latter part of Edward's short reign was continually disturbed by disputes with this princess. They seem to have begun at the instigation of Gardiner, by her writing a letter to the Protector, severely blaming his pressing forward the reformation of religion: he answered her in strong terms, referring to the treasonable practices of the popish party in her father's reign. The course pursued towards Mary was uselessly irritating, but she was well qualified to retort, and did so in a manner very unbecoming a princess; yet though at times on ill terms with her brother, she was occasionally an honoured guest at court.

We have noticed that England was

visited by some wild and wicked visionaries from Germany. Some of them inculcated religious as well as political errors, teaching confused and false doctrines respecting the person of Christ. Many of them recanted, but one foreigner was burned in Smithfield. Another individual also suffered for her religious opinions. Joan Bocher had been a friend of Anne Askew, who suffered in the late reign; she was then active in circulating English Testaments. Having adopted some errors, rather speculative than practical, respecting the person of Christ, she was accused of heresy, and sentenced to death; Edward for some time refused to sign the warrant for her death. Cranmer was sent by the council to urge his compliance. At length, he persuaded the king to sign the sentence. Edward did so, with tears in his eyes, telling Cranmer that "if it was wrong, he must answer for it to God." Cranmer was then unwilling that she should suffer; he exhorted her during several months to recant, but in vain: at last, on May 2, 1550, she was burned in Smithfield.

We defend not such cruelty. This conduct was directly opposed to the precepts and example of our blessed Lord: we can only say that Cranmer and his associates had been brought up Papists. In that school, they learned to persecute. Papists must not be allowed to bring forward these cruelties as any argument against protestantism. They tell against popery, while the favourable contrast presented by the general conduct of Cranmer, compared with the proceedings of Gardiner and Bonner, shows the humanizing tendency of acquaintance with Bible truth even under the disadvantages of the times.

The oppressive conduct of the landholders and higher orders, was one cause alleged by the populace for the revolts already noticed. It is evident that the nobility were now desirous of regaining that power which they lost by the reduction of their number during the civil wars, and through the vigorous sway of Henry VIII. The council of administration formed a centre for the development of these views: we find that body in collision with the lord Protector soon after the popular tumults were suppressed. He had assumed independent power, administering it with much hastiness of temper, and harshness of conduct towards his fellow-nobles; while he was disposed to favour the people, intimating his desire to promote measures for their

relief by curbing the power of the nobility. Thus the aristocracy became united against him, and determined to take away his power as regent. Among other proceedings alleged against him, was the establishing a court of requests in his own house, where he caused the grievances of any poor persons to be inquired into, and if their complaints appeared to be well founded, gave them letters to exhibit in the regular courts of law where they were suitors. This would now be a most improper interference with the equal administration of justice in our courts; but at that period when the courts were not so pure as they are now, Somerset's interference would benefit the oppressed. Cecil, afterwards lord Burghley, who was a secretary of state during part of this reign, was his master of requests, attending to these complaints under the direction of Somerset himself. The proceeding, no doubt, was a popular one, and as such it displeased his political adversaries.

Early in October 1549, Somerset conveyed the king to Windsor, accompanied only by Cranmer, Paget, and Smith, who were rather personal friends than supporters of his power. They mediated with the rest of the council, mutual preparations for a trial of force were discontinued; but the council being invited to Windsor, proceeded thither, from whence they committed Somerset to the Tower. Several articles of misconduct were alleged against him; the one most influential with the nobility, was a charge of siding with the people relative to the late commotions. He submitted, gave up his superior authority, was released, and shortly after resumed his place in the council, strengthening himself by the marriage of his daughter with the son of Dudley, the earl of Warwick. That nobleman now exercised the chief authority, though not directly exalted above his enemies. Warwick found the king strongly attached to the principles of the Reformation. He, therefore, fell in with the measures already adopted, and allowed Cranmer to proceed further, though the habits in which he indulged himself and his attendants showed disregard of real religion.

We have here to notice the encouragement given to foreign reformers. Peter Martyr was settled at Oxford as professor of divinity, and Bucer and Fagius were placed at Cambridge. The universities were visited, and popery repressed.

Cranmer saw that it was most important that the universities, where the instructors of the realm were to be nurtured, should be purified from error, and provided with teachers able to instruct in the truth. He had also to withstand the rapacity of some of the leading political characters of the day, who were very anxious to appropriate to themselves a large part of the revenues of the universities. The attention of the foreigners was especially directed to the national ritual. Another edition of the liturgy was set forth in 1551. In several respects, it was freed from popish errors; but Strype states that in some instances, particularly as to the sacrament of baptism, undefined expressions were used, chiefly at the instance of Bucer, contrary to the recommendation of Melancthon and others.

The principal points in which the reformed differs from the Roman liturgies, are considered to be as follows. 1. The service is in the language understood by the people. 2. Chapters from the Bible are read instead of legends of saints, most of which are false. 3. The service is read aloud so as to be understood and followed by the people. 4. The Ave Mary and addresses to the virgin omitted. 5. Also prayers for the dead. 6. Also prayers to the saints, and several superstitious forms in consecrating different articles. To these should be added, 7. The elevation and adoration of the consecrated bread, in the belief that it is changed actually into Christ's body, by four words muttered by the priest.

A valuable work was also prepared, the Primer or collection of private prayers, intended to assist all who desired the aid of such a manual. In many respects, it is a valuable work: on some points, it sets forth the doctrines of the reformers with more clearness than the public formularies. The particulars relative to these proceedings are interesting, but the reader must be referred to larger and more strictly ecclesiastical histories for full information, and it is probable that much yet remains untold.

We have not hesitated to express decided disapproval of the course pursued by Cranmer and other leading protestants, towards the Romanists and others who were considered heretics; nor may we leave uncensured their efforts to enforce uniformity upon another and more estimable class of men who, like themselves, had suffered under the scourge of popery,

who agreed with the leading reformers in doctrinal views, but desired to separate themselves more fully from popery and its ceremonial observances. Hooper was troubled on this head; being appointed to the bishopric of Gloucester, he scrupled at some of the gorgeous dresses then used by the bishops, in particular the long scarlet cimarre, which retained the livery of that apostate church by whom these trappings had been devised; he also objected to part of the oaths administered at consecration to the episcopal office, in which he was required to swear by "the saints." Compliance was required, but Hooper chose rather to be imprisoned than to offend his conscience. This unseemly variance between the true shepherds of the flock, did not continue long. A compromise was effected. Hooper listened to the counsel of his friends, and submitted upon some points, while the main object was attained by the revision of the services, and the laying aside of the most offensive matters to which he objected; the king himself struck the words "the saints" out of the form of the oath. Hooper proved a valuable and exemplary bishop; the church would have sustained injury had it not obtained his services. It is painful to find that even to the end of this reign, Cranmer and those who acted with him, thought of repressing error, including as such whatever differed from their own views, by legal enactments and commissions of inquiry, which caused a degree of persecution, though very different from the bloody acts of popery. However, these reformers continued active in the use of right means to enlighten the people, by diffusing the knowledge of the truth.

Somerset had lost much of his power as well as his property, including the splendid palace he was building in the Strand from the spoils of monastic establishments. Several of these in the metropolis were demolished to supply materials for Somerset house; this caused the removal of the remains of many human bodies, a proceeding which always causes unpopularity. In disinterring these bones, many caskets were found with pardons from the pope for the sins of the deceased, which had been purchased in the vain hope of serving as passports to heavenly happiness.

Warwick, jealous of his recently acquired power, was induced to renew the proceedings against Somerset. His own aggrandizement, and elevation to be duke

of Northumberland, made him the more fearful of his rival, as Somerset used some measures towards regaining his former influence. Northumberland being informed of them, caused him to be arrested and tried for treason. The peers acquitted him of any treasonable designs, but condemned him to death for plotting against a privy counsellor. It appears that Somerset had neglected the advice of the more moderate of his old friends, listening to some who advised violent proceedings against Northumberland. The king was misled by false reports of Somerset's conduct, and amused with festivities, that he might not have time fully to consider the awful question of his uncle's life or death. Some of these amusements were introduced on the Lord's day. The principles of the youthful Edward ought to have put him on his guard against those who sought thus to lead him to sinful ways. But he consented to their act. Somerset was beheaded on Tower-hill, January 22, 1552, thus suffering the fate which he had caused to be inflicted on his brother. Four of his friends were also executed. Northumberland fondly imagined that he had thus consolidated his power; but Scripture declares, that "the curse of the Lord is in the house of the wicked," that "a man shall not be established by wickedness," and that "a man that doeth violence to the blood of any person hasteth to the pit," Prov. xxviii. 17. Truly Northumberland was hastening on his own ruin. In this instance, as in many others, during the troublous times of our history, we find that as in the case of Joab, the Lord saw fit to return upon guilty nobles the blood of others which they had shed.

Foxe records the particulars of the last hours of the duke of Somerset. He found support from the true religion which he had been so instrumental in making known to others. "After that he had ended a few short prayers, standing up again, and turning himself towards the east side of the scaffold, nothing at all abashed (as it seemed to me) either with the sight of the axe, or yet of the hangman, or of present death; but with the like alacrity and cheerfulness of mind and countenance, as before-times he was accustomed to hear the causes and supplication of others, and especially to the poor, towards whom, as it were, with a certain fatherly love to his children, he always showed himself

the most attentive, he uttered these words." Here follows his address, concluding with the words; "Moreover, dearly beloved friends, there is yet somewhat that I must put you in mind of, as touching Christian religion; which so long as I was in authority, I always diligently set forward and furthered to my power. Neither do I repent me of my doings, but rejoice therein, since that now the state of Christian religion cometh most near unto the form and order of the primitive church; which thing I esteem as a great benefit, given of God both unto you and me; most heartily exhorting you all, that this which is most purely set forth unto you, you will with like thankfulness accept and embrace, and set out the same in your living. Which thing, if you do not, without doubt greater mischief and calamity will follow."

(To be continued.)

PHOTOGENIC DRAWING.

THE following interesting letter on a subject which is exciting great attention, is extracted from a recent number of "The Magazine of Natural History:"—

Sir,—The mode of fixing the images of the camera obscura, and copying engravings, by means of the chemical action of light on paper prepared with a solution of chloride of silver, has attracted so much notice, and produced so much popular excitement, that a few observations on this interesting process will not perhaps be considered out of place in your magazine. I venture to occupy your pages with the less reluctance, because I feel that the application of this heliographic or photogenic art will be of immense service to the botanist, by enabling him to procure beautiful outline drawings of many plants, with a degree of accuracy, which, otherwise, he could not hope to obtain.

That light will act on chloride of silver is by no means a novel discovery, and paper prepared with it was long ago used by Ritter and Wollaston, in testing the chemical action of the rays of the solar spectrum; still, in this country it was not, I believe, applied to any purpose likely to be of use to the naturalist and traveller, until brought into notice by the researches of Mr. Talbot. It is not a little amusing to observe how many pretenders to the discovery have started up since the announcement of Mr. Tal-

bot's discovery, and that of M. Daguerre in France. The latter gentleman has, through M. Arago, at a late meeting of the French Institute, announced his mode of preparing a sensitive paper, far exceeding that of Mr. Talbot in delicacy, but otherwise possessing the same property of indicating intensity of light by depth of colour, and consequently differing from that marvellous preparation which he is said to possess, and which represents shadows by depth of colour, precisely as in nature.

M. Daguerre prepares his heliographic paper by immersing a sheet of thin paper in hydrochloric ether, which has been kept sufficiently long to be acid; the paper is then carefully and completely dried, as this is stated to be essential to its proper preparation. The paper is next dipped into a solution of nitrate of silver, (the degree of concentration of which is not mentioned,) and dried without artificial heat in a room from which every ray of light is carefully excluded. By this process, it acquires a very remarkable facility in being blackened on a very slight exposure to light, even when the latter is by no means intense; indeed by the diffused day-light of early evening in the month of February. This prepared paper rapidly loses its extreme sensitiveness to light, and finally becomes not more readily acted upon by the solar beams than paper dipped in nitrate of silver only. M. Daguerre renders his drawings permanent by dipping them in water, so as to dissolve all the undecomposed salt of silver.

This process is very inconvenient, for many reasons, among which are the difficulty of procuring, as well as the expense of hydrochloric ether: on this account I prefer Mr. Talbot's process, although it is to be regretted that this gentleman has not stated more explicitly the proportions in which he uses the ingredients employed in the preparation of his sensitive paper. I have performed a set of experiments on this subject, and can recommend the following proportions as the most effective and economical. Two hundred grains of common salt are to be dissolved in a pint of water, and sheets of thin blue wove post paper saturated with the solution, which, for this purpose, should be poured into a dish, and, the paper being immersed, the application of the solution to every part should be ensured by the use of

a sponge. The paper is then to be removed, drained of its superfluous moisture, and nearly dried by pressure between folds of linen or bibulous paper.

Two hundred and forty grains of fused nitrate of silver are then to be dissolved in twelve fluid ounces of water, and this solution is to be applied by means of a sponge to one side of each sheet of the previously prepared paper, which side should be marked with a pencil, so that when the paper is fit for use the prepared side may be distinguished. The sheets of paper are then to be hung upon lines in a dark room to dry, and when nearly free from moisture, their marked sides are to be once more sponged over with the solution of silver, and finally dried; they are then to be cut into pieces of convenient size, and preserved from light, or even too much exposure to air, by being wrapped up in several folds of brown paper, and kept in a portfolio.

The proportions above recommended are sufficient for the preparation of a quire of the kind of paper alluded to; if more of the salt of silver were used, the paper would indeed become darker by the action of light, but its expense would be proportionally increased: and when prepared in the manner directed, it assumes, by less than a minute's exposure to the rays of the sun, a rich mulberry brown tint, of sufficient intensity to define an outline very beautifully, which indeed is all that is required.

To use this paper, the specimen, of which a drawing is required, is removed from the herbarium, placed on a piece of the paper, and kept *in situ* by a pane of common glass pressed by weights: a piece of plate glass, however, is preferable, as it is sufficiently heavy to press the plant close to the paper. The whole is then placed in the sunshine, and in less than a minute all the uncovered parts of the paper will assume a rich brown tint. The paper should then be removed from the direct influence of the sun, and placed in a book until the drawing be rendered permanent: the specimen, quite uninjured by the process, may then be replaced in the herbarium, and the drawing of another be taken, and so on. So rapidly is this process executed, that twenty-five or thirty drawings may be obtained in an hour, providing we are favoured with a direct sunbeam; if, however, we have only the diffused day-light, five or ten minutes, and sometimes even more, are

required to produce a drawing with well-defined outlines.

If drawings of recent plants be required, specimens of proper size should be cut, and if not too rigid, placed on a piece of paper, and kept in a proper position by means of a pane of glass, as in the case of dried specimens; but if the plant be rigid, the specimens should be placed for twenty-four hours between folds of blotting paper, under a heavy weight, before placing them on the sensitive paper. Having obtained as many drawings as are required, the next thing is to fix them, so that their otherwise evanescent character may not deprive them of their value. For this purpose place them in a dish, and pour cold water over them; allow them to soak for ten minutes, and then transfer them to, or sponge them over with, a solution, made by dissolving an ounce of common salt in half a pint of water, to which half a fluid ounce of the tincture of the sesqui-chloride of iron has been added. The drawings thus prepared may be dried by pressure between folds of linen, and exposure to the air; and may then be examined without danger. On looking at them, every one must be struck with the extreme accuracy with which every scale, nay, every projecting hair, is preserved on the paper; the character and habit of the plant is most beautifully delineated, and if the leaves be not too opaque, the venation is most exquisitely represented; this is particularly the case with the more delicate ferns, as *Polypodium Dryopteris*. Among those classes of plants which appear to be more fitted than others for representation by this process, may be ranked the ferns, grasses, and umbelliferous plants; the photogenic drawings of the former are indeed of exquisite beauty.

The fact of the object being white on a brown ground does not affect the utility of this mode of making botanic drawings; indeed, I almost fancy that their character is better preserved by this contrast of tint, than by a coloured outline on a white ground. Every one will be fully aware of the value of this process to the botanist, in obtaining drawings of rare plants preserved in the herbaria of others, and which he would otherwise have probably no means of obtaining.

If the drawing of a tree or a large shrub be required, a box blackened inside,

having a hole at one end about one and a quarter inch in diameter, must be provided: in this hole should be placed a lens of five or six inches focus; if one of longer focus be used, the dispersion of light becomes too great to ensure an accurate representation. When the tree or shrub is well illuminated by the solar beams, the lens should be presented towards it, at a distance varying of course with the height of the object. A piece of card-board should then be placed in the box, a little beyond the true focus of the lens, and the former moved until a well-defined bright image of the tree, etc. is formed on the card, of course in an inverted direction. The box is then to be placed on any convenient support in this position, and a piece of the prepared paper fixed on the card, the lid of the box is then to be closed, and the whole left for half an hour, at the end of which time a beautifully accurate outline of the object will be found on the paper, which is then to be rendered permanent in the usual manner. It is obvious that this plan is unavailable on a windy day, on account of the branches of the tree, etc. being continually moving, so that it is of far less use to the botanist than the above described process for obtaining drawings of small specimens.

Various other applications of this paper will suggest themselves to the minds of naturalists; but, having far exceeded my intended limits, I conclude by subscribing myself,

Yours very faithfully,
Golding Bird, M.D.

OLD HUMPHREY ON EXAGGERATED EXPRESSIONS.

SOME time ago, a correspondent, whom I would not willingly neglect, requested me to pen a few plain remarks on the common evil of giving utterance to inflated expressions and remarks in common conversation.

It is a somewhat ungrateful task to tell those who would shrink from the imputation of a falsehood that they are in the daily habit of uttering untruths; and yet, if I proceed, no other course than this can be taken by me. It is of no use to adopt half measures, plain speaking saves a deal of trouble.

I love the man who steps along on his toes that he may not tread on the toes or the heels of his neighbours. Some are remarkable for this habitual tenderness

to their fellow-creatures, and it does my heart good to see it; but in a case where trifling is losing time, and decision is really necessary, we must run the risk of giving offence if we would really do good.

My correspondent says that I make capital "caps;" and that if all those who need them would wear them, my hints would be very profitable. I am, however, sadly afraid that most of the caps I make would fit my own head quite as well as they would fit the heads of my neighbours. But to my task.

The examples about to be given by me of exaggerated expressions, are only a few of the many that are constantly in use. Whether you can acquit yourselves of the charge of occasionally using them, I cannot tell; but I dare not affirm for myself that I am altogether guiltless.

"I was caught in the wet last night; the rain came down in torrents." Most of us have been out in heavy rains; but a torrent of water pouring down from the skies would a little surprise us after all.

"I am wet to the skin, and have not a dry thread upon me." Where these expressions are once used correctly, they are used twenty times in opposition to the truth.

"I tried to overtake him, but in vain; for he ran like lightning." The celebrated race-horse Eclipse is said to have run a mile in a minute, but poor Eclipse is left sadly behind by this expression.

"He kept me standing out in the cold so long, I thought I should have waited for ever." There is not a particle of probability that such a thought could have been for one moment entertained.

"As I came across the common, the wind was as keen as a razor." This is certainly a very keen remark, but the worst of it is that its keenness far exceeds its correctness.

"I went to the meeting, but had hard work to get in; for the place was crowded to suffocation." In this case, in justice to the veracity of the relator, it is necessary to suppose that successful means had been used for his recovery.

"When I mentioned it to her, she turned as pale as a sheet." I am sceptical enough to believe that had an actual comparison taken place, it would have been found otherwise.

"I have been sadly troubled with head-ache; I thought I should have died, I was so ill." If they who use this expression on every light occasion, did really reflect on death as frequently as

they represent themselves to do so, it might be attended with the most salutary consequences.

"You would hardly know her again, she is as thin as a threadpaper." Either the threadpaper must have been of an unusual size, or she must have been very thin indeed.

"We came along the lane, a horrid road, up to our knees in mud." Some people a little more diffident, satisfy themselves with saying, "It was over my shoe tops in mud." All I can say is, that if either the one statement or the other be correct, it is high time the road should be mended.

"He is a shrewd fellow ! as deep as a draw-well." There is an old adage that truth lies at the bottom of a well : I am afraid that it is not at the bottom of this draw-well.

"We stood there for an hour : my feet were as cold as ice." If the feet were once as cold as ice, there would be very little heat left in the head or the heart.

"Oh nothing will hurt him ; he is as strong as a horse." Some go even farther than this, and say, "as strong as an elephant;" but both expressions are too strong to be consistent with fact.

"It must have been a fine sight ; I would have given the world to have seen it." Fond as most of us are of sight-seeing, this would be buying pleasure at a dear price indeed ; but it is an easy thing to proffer to part with that which we do not possess.

"It made me quite low spirited, my heart felt as heavy as lead." We most of us know what a heavy heart is, but lead is by no means the most correct metaphor to use in speaking of a heavy heart.

"I could hardly find my way ; for the night was as dark as pitch." I am afraid we have all in our turn calumniated the sky in this manner ; pitch is many shades darker than the darkest night we have ever known.

"He ran till his face burnt like a fire-coal." Ay, and if every one blushed in the same proportion in which he departed from truth, he who uses this form of speech would have a face ruefully red, though not exactly burning like a fire-coal.

"I have told him of that fault fifty times over." Five times would, in all probability, be much nearer the fact than fifty.

"I never closed my eyes all night

long." If this be true, you acted unwisely ; for had you closed your eyes, you might, perhaps, have fallen asleep, and enjoyed the blessing of refreshing slumber ; if it be not true, you act more unwisely still, by stating that as a fact which is altogether untrue.

"He was in such a passion that he foamed at the mouth like a mad dog." Rather mad language this ; but many a man in his descriptions acts like a bad painter who, almost always, has too much colour in his brush.

"He is as tall as a church spire." I have met with some tall fellows in my time, though the spire of a church is somewhat taller than the tallest of them.

"You may buy a fish at Billingsgate as big as a jackass for five shillings." I certainly have my doubts about this matter ; but if it be really true, the people at Billingsgate must be jackasses indeed, to sell such large fishes for so little money.

"He was so fat he could hardly come in at the door." Most likely the difficulty here alluded to was never felt by any one but the relator ; but supposing it to be otherwise, the man must have been very broad, or the door very narrow.

"You don't say so ! why it was enough to kill him !" The fact that it did not kill him is a sufficient reply to this unfounded observation ; but no remark can be too absurd for an unbridled tongue.

Thus might I run on for an hour, and, after all, leave much unsaid on the subject of exaggerated expressions. We are hearing continually the comparisons, "black as soot, white as snow, hot as fire, cold as ice, sharp as a needle, dull as a door-nail, light as a feather, heavy as lead, stiff as a poker, and crooked as a crab tree," in cases where such expressions are quite out of order.

The practice of expressing ourselves in this inflated and thoughtless way is more mischievous than we are aware of. It certainly leads us to sacrifice truth ; to misrepresent what we mean faithfully to describe ; to whiten our own characters, and sometimes to blacken the reputation of a neighbour. There is an uprightness in speech as well as in action, that we ought to strive hard to attain. The purity of truth is sullied, and the standard of integrity is lowered by incorrect observations. Let us reflect upon this matter freely and faithfully. Let us love truth, follow truth, and practise truth in our thoughts, our words, and our deeds.

THE WONDERFUL NAME.

WE read in the first verse of the Bible that "in the beginning God created the heaven and the earth:" and in the first chapter of the epistle to the Colossians, we are told concerning the Lord Jesus Christ, that "by him were all things created, that are in heaven, and that are in earth, visible and invisible, whether they be thrones, or dominions, or principalities, or powers: all things were created by him, and for him; and he is before all things, and by him all things consist." No consideration can be better fitted to impress the mind with the infinite condescension of Christ, than the one here referred to—the magnitude of creation. The psalmist felt its power when he exclaimed, "When I consider thy heavens, the work of thy fingers, the moon and the stars, which thou hast ordained; what is man, that thou art mindful of him? and the son of man, that thou visitest him?"—Psa. viii.

To appreciate the argument from this source, it is necessary to remember that the globe which we inhabit is but a small speck in the universe—less, perhaps, in comparison with its whole extent, than a single grain to the sand upon the seashore. The sun is a body of vast dimensions, equal in bulk to thirteen hundred thousand globes of the size of the earth; and the diameter of the solar system of which we form a part, is not less than three thousand six hundred millions of miles, a distance which a cannon ball moving at the rate of five hundred miles an hour would not traverse in less than eight hundred years. And yet if this whole system, sun, planets, and satellites were annihilated, "it would scarcely be missed by an eye which could take in at a glance the whole compass of nature."* For how insignificant is this cluster of worlds when compared even with the countless spheres which gem our midnight skies, and the still greater concourse which are brought into view by the telescope. The nearest of those stars is believed to be "not less than twenty billions of miles distant from our globe, a distance which a cannon ball, moving with its ordinary velocity, would not traverse in four millions five hundred thousand years, or seven hundred and fifty times the period which has elapsed since the Mosaic creation." Each of those stars (and their number is only to be estimated by

* Addison.

millions) is a sun, shining with unborrowed lustre, and attended, it is probable, like the solar centre of our own system, with a vast and beautiful "planetary equipage." Each of them presides over an assemblage of secondary orbs, holding them in abeyance to its mysterious power, dispensing to them light and heat, determining their successive seasons, and ever ministering from its undiminished fulness to the life and comfort of the unnumbered tribes of creatures which inhabit them.

Nor have we to stop here. Here indeed our finest instruments may fail, but who will presume to restrict the creative energies of Omnipotence to the narrow field which may be scanned by our feeble vision? Who will deny that the boundless expanse which lies beyond the remotest star ever brought within the field of the telescope, may be filled with still more magnificent displays of the wisdom and power of God? Who does not believe that in those illimitable "wilds of ether," other worlds, replenished with Jehovah's bounty, and other suns, each with his shining retinue of spheres, and other firmaments, resplendent with starry glories, reveal to millions of holy and happy intelligences the perfections of their adorable Creator, and "with expressive silence" celebrate his praise.

We have no faculties to grasp a theme like this. The mind returns from the contemplation of it, overwhelmed with its vastness, and ready to exclaim, "Behold God is great, and we know him not, neither can the number of his years be searched out." "Great things doeth he which we cannot comprehend." "Stand still, and consider the wondrous works of God." But if we are lost in amazement in the survey of the material universe, how little can we comprehend of its glorious Author! How imperfect must all our conceptions be of that Being, who with a single word brought this stupendous system into existence; "who spake and it was done; who commanded, and it stood fast!"

Our loftiest ideas of such a Being are low and grovelling; but all things around us and above us, every rolling planet, every twinkling star, every rock, and stream, and flower appear to say, "His name is Wonderful." The work of creation is indeed wonderful, but there is a greater wonder still, that He who wrought this work, who laid the foundations of the earth, and garished the heavens with beauty, and

stationed these countless systems of worlds throughout the boundless fields of space, and who still upholds them by his power, and retains them in their orbits, and secures with infallible precision their revolutions; that he should stoop from the habitation of his holiness and glory to enter our vile abode, to take upon himself our nature, and to be born of a woman—this is a wonder passing knowledge! Well may we ask with an eloquent divine of a former age, "Was ever love like this? Did ever grace stoop so low? Should the sun be shorn of all its radiant honours, and degraded into a clod of the valley; should all the dignitaries of heaven be deposed from their thrones, and degenerate into insects of a day, great, great would be the abasement; but nothing to thine, most blessed Jesus! nothing to thine, thou Prince of Peace! when for us men and for our salvation, thou didst not abhor the coarse accommodations of the manger, thou didst not decline even the gloomy horrors of the grave." Surely if his title, "Wonderful," be written upon the starry heavens, it is written in still more expressive characters upon the manger of Bethlehem. His primeval glory was wonderful, but his incarnation is thrice wonderful.

Nor was the Saviour less wonderful in his miracles. The veil which usually concealed his Divinity during his earthly ministry, is here drawn aside, and he stands before us, "a God confessed;" yet a God in whom we know not whether to admire most, his benevolence or his power. It is easy to fancy that we see him travelling with his few disciples through the province of Galilee, and ever and anon arrested in his journey from village to village, by companies of the afflicted or diseased, who come forth to solicit his compassion, and listen to his instructions. Here is one whose ear never thrilled with the melody of sweet sounds, or responded to the sacred name of "father," "brother," "friend," and whose life, though spent among the busiest scenes of earth, has passed in an unbroken silence. Here is one whose tongue was never loosed, and whose sealed lips have made him a stranger to the delights of social intercourse. Here is another for whom the sun has shone, and night put on her starry canopy, and earth arrayed herself in verdure, and nature exhausted her skill upon the "human face divine," in vain. He lives in darkness. He has never looked upon

his mother's smile, nor gazed with kindling rapture on the beaming features of his child; and when he hears the voice of inspiration say, "The heavens declare the glory of God, and the firmament sheweth forth his handy-work," the sentence falls upon his ear like an unknown tongue; he knows not what it means. But a single word gives sight to the blind, and speech to the dumb, and hearing to the deaf; and they break forth together in ascriptions of praise to their common Benefactor. Here, we behold him by the couch of sickness, restoring the hue of health to the pallid cheek of disease, infusing fire into the languid eye, invigorating the feeble limbs, and giving back to a rejoicing household a daughter or a mother, snatched from the threatening grasp of death. Here, an unhappy father approaches him with his only son, who is possessed of a devil. "Ofttimes," is his pitiable account of him, "he falleth into the fire, and oft into the water; and wheresoever he taketh him he tear-eth him; and he foameth, and gnasheth with his teeth, and pineth away." And Jesus rebukes the foul spirit, and he departs out of him. Here, he stops a funeral procession passing out of the gate of a city, with the remains of a young man, "the only son of his mother, and she a widow." Touched with pity for her lonely condition, he restores the youth to life, and, "makes that widow's heart to sing for joy." Here he stands by the grave of his friend Lazarus, now four days buried. Mary and Martha, and a company of their intimate friends are at his side. The stone is rolled away from the door of the cave; and he cries with a loud voice, "Lazarus, come forth!" And immediately "the dead hears the voice of the Son of God, and lives!" Lazarus comes forth, and again becomes an inmate of that favoured house at Bethlehem, so often the resort and resting-place of the Saviour.

In this way, we might follow him through the whole of his public ministry. "Despised and rejected" as he was of men, inanimate nature felt and confessed the presence of its God. His intelligent creatures refused to worship him, but the raging elements acknowledged him as their Lord. The living proclaimed him an impostor; but the dead came out of their tombs to pay him homage. His name was "Wonderful, Counsellor,

the Mighty God, the Everlasting Father, the Prince of Peace."—*Rev. Henry A. Boardman.*

ANTS' NESTS IN PARAGUAY.

JOURNEYING onward to Assumption, we emerged one morning from a dark forest into a more open country, covered with palm-trees. I was much surprised to observe, that mingling with these, and almost in equal numbers, rose thousands of conic masses of earth, to the height of eight and ten feet, and having a base of nearly five in diameter. My surprise increased, when, on approaching these earthen pyramids, I found that they were not only tenanted by myriads of the small black ant, but were the colossal workmanship of that diminutive insect. Dismounting to investigate the economy of so many vast and curious republics, I first endeavoured to ascertain the nature of the substance out of which were constructed their Babylonish temples. They were obviously impervious to the heaviest rains, and could not be shaken by the strongest hurricane. No water appeared ever to have penetrated, no lightning ever to have scattered them; yet they were masses of mere clay. I endeavoured, with my strong gaucho knife, to dig into one of them; I might as well have attempted to penetrate with it the flinty rock. My companion, Gomez, willing to surprise me, had not said a word; nor, in my eagerness for evidence from my own senses of the nature of so curious a phenomenon as that which presented itself to my view, had I asked him any questions. But the moment I attempted to dig into the impenetrable mass, he smiled, and said, "Senor Robertson's devalde." "Believe me, it is in vain." He then proceeded to tell me that these obelisks had been there from time immemorial; and that, for aught he or any body else knew, they might be antediluvian. Though neither antiquary nor geologist, this story excited me the more closely to examine the structure of those venerable piles; and the more nearly I inspected them, the more was my wonder excited. On the apex of the cone there was an oval basin, from which diverged about thirty aqueducts, intended, evidently, to carry off all the water which might fall upon the pile. Between those conductors, from the base to the top of the structure, were innumerable perforations. There were pouring out of them, at one side, and into them at another,

myriads of busy ants. Those which went in were all top-heavy with their unwieldy loads of leaves, grass, and grass-seeds; those which issued were speeding in search of more of the same material, which they had, on a previous trip, deposited in the great and common emporium of the public wealth within the pile. No doubt as to the way, no intermission as to the labour, embarrassed a single member of the community. Sometimes a huge burden of straw, or part of the leaf of a palm-tree, would fall from the back of its bearer, but in a moment it was replaced by half-a-dozen outgoing and unencumbered labourers. The sturdy porter then proceeded, as before, to his place of destination, staggering under the unwieldy heap which pressed upon his shoulders. I next proceeded to trace the various paths which led to and from the clay towers. These paths intersected and literally cut up the whole country; they were thronged with coming and going multitudes, in each individual of which the one predominant anxiety seemed to be—*haste*. But their excursions were not confined to soil; every palm-tree was indented in half-a-dozen places with their footsteps, and both the fruit and the leaf of the stately plant (neither to be reached till you reach the top,) were conspicuous elements of the traffic of the busy inhabitants of the pyramids below. Azara has mentioned, in his work on Paraguay, that he encountered similar masses of earth raised by the ants, but so soft, that his horse having come unawares upon one of them, (it must of course have been at night,) he not only demolished the heap, but sunk with his fore-legs into the abyss beneath it. He was travelling, however, along the coast, and upon marshy ground. I was a good way from the coast, and in the midst of a country in which the clay is very remarkable for its hardness and consistency. The ants, instinctively knowing themselves to be subject to all the inclemencies of the weather, do also instinctively select for their buildings the very hardest and most impervious parts of the clay in their immediate vicinity. Not only so, but, as wise master-builders, they interweave this clay in such a manner, with millions of bits of the bark of the palm-tree, as to constitute that durable and impenetrable mass of which I have spoken.—*Robertson's Letters on Paraguay.*



THE JORDAN.

THE following description of this remarkable river, is from Hardy's Notices of the Holy Land.

The Jordan, though the principal river of Canaan, is but an inconsiderable stream, and about four miles from its mouth, not more than twenty yards across, muddy, and very rapid. Its whole course is about 130 miles: it rises about four miles north-east of Banias, passes through the waters of Merom and the lake of Tiberias, and discharges itself, with great impetuosity, into the Dead Sea. The banks are about twelve feet above the water. On the eastern side there is a lower bank in addition, covered with reeds, willows, and oleanders, in which the wild beasts find a shelter in the dry season, but are forced from their refuge at the swelling of the river by the rains. The Jordan overflowed all its banks at the time of harvest, in the days of Joshua, a circumstance which never occurs at present. I know it is said that the lower bank alone is here meant by the sacred writer; but why, then, does he expressly say "all his banks?" There must, therefore, have been a greater quantity of rain in former times than now, which accounts for the apparent discrepancy between the present state of the land, and the glowing descriptions of the prophets. The Israelites had many promises given unto them, that if they obeyed the commandments of the Lord their God, they should receive the rain in due season, and a scar-

city of rain was to be the punishment of their disobedience. The plain of Jordan during the summer heats cannot be better described than in the prophecy of Moses; "Thy heaven that is over thy head shall be brass, and the earth that is under thee shall be iron." It was long doubted by what medium the waters of Jordan were discharged previously to the formation of the Salt Sea; but recent discoveries have led to the supposition that they were carried into the Red Sea through its eastern gulf.

BRANCHES.

ONE of the finest objects of the visible creation is a magnificent tree, with its boughs stretching from the trunk, and its branches spreading around, studded richly with sprays, covered with a profusion of leaves, and bearing, as it may happen to be, the pleasant blossoms of summer, or the ripening fruit of autumn. Compare a tree of the forest, or the pleasure ground—the forest oak, for example, or the chestnut of the park—with the decapitated pollard of the osier holt, or with the boughless and branchless elm of the hedgerow which has been, according to the law of the land, "lopped, but not topped," and the contrast will appear striking and remarkable. The pollard-willow, or any other pollard, bears no slight resemblance to a mop, or a huge cabbage, that has outgrown its fellows—stiff, formal, and unsightly. The lopped elm, so common

and conspicuous in the hedgerows around London, looks still more mutilated and "shorn of its fair proportions;" the green tufts of leaves clustered around the stem, presenting a stunted appearance; while the heights to which those trees frequently attain, are out of all proportion to their girth, and most unlike the same trees when left to the natural expansion of their branches, untouched by artificial lopping for the purposes of economy. The natural beauty of trees is mainly dependent on the growth and disposition of the branches, which are no less diversified in the various species than the beauty of flowers, or of the human countenance. The oak, for example, which has stood for centuries unscathed by the winds, has its branches symmetrically set, and their contour regular and beautiful. The chestnut has a similar character; while the sycamore, or oriental plane tree, from its greater breadth of leaf, is more gorgeous and rich in foliage, and affords a denser umbrage as a shelter from the summer sun or the pelting rain; and the horse-chestnut, (*Æsculus Hippocastanum*,) particularly when in full blossom, exceeds even the sycamore in beauty of form and magnificence of outline.

The beech, the hornbeam, and the lime, (*Tilia Europæa*) present a very different character; all the three being somewhat similar, though specifically distinct. The branches in these, while they spread forth from the trunk, have a tendency to bend down in graceful curves, the tops rising slightly as if making an effort to regain a perpendicular position. These trees can only be seen to advantage in the park or the pleasure ground, where they have room to expand their finely curved branches at some distance from other trees. In the crowded plantation, or the tangled wood, instead of expanding, they shoot up a weak and thinly branched stem of little beauty and less value. Of the three species of trees in question, the beech is the slowest, and the lime the quickest in growth, the branches increasing in the latter to several feet during one season.

How very different from any of the preceding are the pendent branches and elegantly drooping spray of the birch, particularly of the variety known by the name of the weeping birch, which is abundant in a wild state throughout the mountain ravines of Wales and Cum-

berland, giving to the romantic rocks a graceful beauty, which nothing else could impart, and contrasting finely with the very different forms of the wild cherry and of the mountain ash, often seen in the same locality. The wild cherry has its branches as thinly set, perhaps more so, than the weeping birch; but, though these are slender and peculiar, they show no tendency to droop, however far they may extend from the main trunk. The mountain ash again is more apt to extend its trunk than its branches; but the old tree may be frequently seen bending from a rocky cliff in the passes of the Scottish mountains, and of the Swiss Alps, and when white with fragrant blossoms, or loaded with scarlet berries, is no less beautiful, though in a different way, than the tall weeping birch and its waving branches.

But so far as their branches are in question, the most striking of the mountain trees are the firs, pines, and cedars, whose mode of branching is altogether different from that of deciduous trees, as shall now be explained. In the thick forest, or the dense wood, the lower branches of trees when deprived of a due proportion of light and air, decay and sometimes fall off, while the upper branches continue to grow; but what thus takes place as an accidental circumstance, is the natural process of the mountain evergreens. When a fir or a cedar puts forth branches, these grow in circles round the stem; that is, the stem rises from a bud in the centre, and the branches from buds disposed around it; but when several circles of branches, one above another, at nearly equal distances, have thus been produced, the first circle of branches decays, and at length falls off, leaving in the end no trace even of their insertion; and the trunk advances in height, every successive season adding to the circles of branches which form the head of the tree. In favourable situations for this mode of growth, when no accident occurs to break the top, the height to which these trees attain is very great. Every one knows that the cedars of Lebanon have been celebrated for their height since the era of king Solomon; and were they permitted to grow untouched, there is no reason to doubt, that they would now, in the course of years, attain equal magnitude to that which acquired for them their former celebrity. The writer of this has seen in the Black

Forest, a group of Scotch firs (*Pinus sylvestris*) with trunks that could not be less than a hundred and twenty feet, perfectly straight and without a branch from the ground up to the last green circle of living branches which formed the head. In the larch, and the silver fir, and the spruce fir, the circles of branches do not so speedily decay as in some of the other species; and hence their heads are not so picturesque as those of the cedar and the Scotch fir, at least not till they attain considerable age: for in their earlier stages of growth, they depend more on their lower branches, so far as beauty is in question, than on their heads. In some of the alpine trees, the curving of the lower or decayed circles of branches is peculiarly picturesque and beautiful, and gives a very striking character to the scenery.

One class of trees, the palms, including the date and the cabbage tree, can scarcely be said to possess any branches, unless we consider their very long and large leaves as such; these decaying and falling off in a similar manner to the circles of branches in the firs, as the stems advance in height; though it is worthy of remark, that while advancing in height, they do not increase in thickness, in a tapering manner, like firs or deciduous trees; but the stem remains of equal thickness from the root to the top, like a cane or a bamboo.

As leaves are indispensable for preparing sap, by exposing it to the influence of air and of light, as explained in a previous number of the "Visitor," (see page 277,) so with the remarkable exception of the palm trees just mentioned, branches are, in some measure, indispensable for the spreading and exposure of leaves, at least in plants and trees of considerable magnitude.

All branches, as well as leaves and flowers, originate in buds; but a branch being a portion of the body or stem of a tree, differs from the bud it arises from, and exactly resembles the stem or trunk in structure, though the texture is less compact from its being necessarily younger, by at least one season, in trees, and more or less in other plants. In looking at a tree, we might be apt to conclude, that the stem or trunk would measure as much, or perhaps more, than the head of branches which spring from it, and to which it has to give support and supply nourishment. This, however, is so far from being the case, that

an eminent French writer on trees, M. Du Hamel, determined by careful measurement, that the solid dimensions of the whole mass of branches, forming the head of the tree, is frequently, at least, one-fourth or one-fifth more; and for this reason, that the trunk increases more slowly than the branches, though it grows gradually more compact and dense in texture, and of course has a greater specific gravity than the branches. It may be a question, taking this view of the matter, whether the same disproportion would be found in the weight as in the measurement of the trunk and the branches forming the head.

It is in consequence of the branches being so much more bulky than the trunks, that trees, when crowded with branches, are apt to be weakened and exhausted, (so in the case of fruit trees, being thereby rendered less capable of bearing, and in the case of timber trees, being rendered less solid and valuable,) that the operation of pruning is had recourse to for the purpose of repressing luxuriance, and increasing the general vigour of growth. The practice is of great antiquity, and several allusions are made to it in the sacred volume; as in the beautiful passage, where our Saviour says, "I am the true vine, and my Father is the husbandman. Every branch in me that beareth not fruit he taketh away: and every branch that beareth fruit, he purgeth it, that it may bring forth more fruit." Pruning is also mentioned by the prophet Isaiah in chap. v. 6, where he compares the church to a vineyard.

But as trees do not thrive well without a due supply of leaves, which usually grow on the branches, and seldom on the stem, when all the branches are cut off from a tree, it not unfrequently dies before it can push out a sufficient number of branches. This, however, will depend, in some measure, on the species of tree. In the case of stone fruit trees, as the cherry and plum, it is very apt to destroy them altogether; while in trees so full of life as the elder, and even the ash, the elm, and the oak, it sometimes adds to their vigour to "head them down," as it is termed by practical men. When the tree, accordingly, is vigorous, it survives the loss of its branches, and pushes out fresh ones in a crowded form, as may be seen in the acacias (*Robinia pseud-acacia*) of Belgium, which look more like mops than

trees; and the pollard, oaks, and mutilated elms, near London, are produced by a similar process. The acacia, when left to its natural growth, is, so far from being formal and mop-like, a very full-growing and graceful tree; the branches being at considerable distances, spreading wide, and increasing rapidly, a circumstance which has obtained for the tree the name of locust tree, in America and elsewhere.

The osier is a remarkable instance of the life of a tree continuing, in spite of the severest system of pruning off the whole branches annually. The stump only is left in the ground, about a foot above the surface, in which state it remains during winter; but, on the approach of spring, a great number of branches, consisting of the long slender twigs, so valuable in the manufacture of baskets, rise up to a height proportional to the vigour of the stump, and the congeniality of the soil in which it is planted. These branches are allowed to grow during summer, till the leaves fall in autumn, when they are cut down for the use of the basket maker. It may be remarked, however, that if these osier branches, instead of being cut down after the leaves fall, were pruned close to the stump in spring, or early in summer, the vigour of the root would most probably be much injured, if not destroyed; for the numerous leaves of the young branches of course contribute to the vigour of the root during summer.

It has been stated by most writers, that the expansion of the branches of a tree, above ground, are conformable and proportional to the extension of the roots under the surface of the soil; but though this may be true in general, there are, no doubt, more exceptions to it, than can be proved in our present state of knowledge. In some instances, it would appear, that the roots extend even further than the branches; at least, roots may often be seen on or near the surface of the ground, far beyond the circumference of the branches of the nearest tree. But strict proof would, in such cases, require that all such roots should be actually dug up and traced to the tree from which they are supposed to spring, otherwise the roots, observed beyond the circumference of the branches, may have belonged to some tree previously cut down.

The very great extension of the roots of climbing shrubs, such as the vine,

the clematis, and the honeysuckle, renders it extremely difficult to transplant with success any plant of several years' standing, unless previously potted to confine the roots within bounds.

J. R.

PETTY JEALOUSIES.

It was one lovely feature in my uncle's character, or rather it was one of the great principles that diffused its influence through all his actions, a desire to make every body around him happy. If ever he was ambitious to extend his power and widen the circle of his influence, it was not for the selfish pleasure of adding house to house, and field to field, or making himself a man of greater consequence by commanding a larger number of votes at the county election, or any other of the selfish motives that actuate too large a portion of mankind; but that he might get within his reach a larger portion of his fellow-creatures, to do them good. A proof that this was in sincerity his aim, existed in the fact, that wherever the circumference of his circle of influence might be fixed, it was well filled, and those nearest the centre most sensibly and constantly and powerfully realized and enjoyed its benign control. This is not always the case. Some people are very eccentric in their benevolence: they must do things upon a large scale; all their doings must be with a great blaze and a great report, and extend to a great distance; but there is no mellow, gentle light to shed its cheering influence at home. Such persons, by their splendid actions, may excite great admiration and applause abroad, and if, as is too often the case, the honour that cometh from man is the stimulus of their zeal and liberality, verily they have their reward; but there is little to call forth the respect, gratitude, and esteem, or to promote the happiness of those most nearly connected with them—perhaps there is much to repel and disgust, and render uncomfortable. Dear uncle Barnaby! it was not so with him. Those revered and loved him most heartily who knew him most intimately; and many had reason to be thankful for him who never saw his face, nor heard his name. His was Christian benevolence on a right scale. It commenced in a point, and extended to a circle wide enough to encompass the whole world. His beneficent actions formed a circle as complete, though not so extensive: it was limited

only by his ability. No person who came within the reach of his influence was willingly suffered to escape being benefited by him. Shall I be accused of expressing the partial judgment of a near relative, if I affirm my belief, that no one was injured by it? At least, I never saw an instance, or heard a complaint, that led to a contrary suspicion. And yet uncle Barnaby was not always successful in his efforts. Some people in the world are amazingly ingenious in the art of self-tormenting. I have known more than one such, who completely defeated my uncle's kind endeavours to do them good, and make them happy. This was sometimes a source of vexation to my good uncle; and his remarks on these occasions I hope did something towards impressing me with a sense of the folly and sin of making ourselves and other people uncomfortable by our hasty, selfish tempers.

Among the many forms in which selfishness displays itself is that of petty jealousy. I will give a few instances.

My uncle, as it may be readily supposed, was much beloved among his servants, and I do think he was blessed with as steady, trusty, respectable a set of domestics as could be found in any one household; most of them old standards. Indeed, it was a rare thing for a servant to leave the family, except on occasion of marriage or old age; when, it need hardly be said, they were comfortably provided for by their own carefulness and my uncle's liberality.

My uncle had a severe illness. On this occasion not one of the household was behind another in testifying their attachment to their master, by willing endeavours to serve and please and promote his comfort: indeed, all were ready to complain that their services were not sufficiently required; for my uncle liked to have things done in a quiet way, and gave no more trouble than was needful. It was quite a matter of contrivance with Mrs. Rogers, the housekeeper, to give every one a turn of night-watching or other service, that none might feel themselves neglected, or excluded from the privilege of waiting on so good a master. It happened that the old cook had lately married away, or at least that my uncle had been so long highly favoured in point of health, as to have had no occasion to call into requisition the skill of his new cook in sick cookery. In the ordinary preparations for the table, she

had acquitted herself well, and given great satisfaction; but I suppose it is quite a different branch of the art of cookery to prepare simple and delicate messes for the sick, from what it is to mingle palatable dishes for the hearty. So it was, that though not the slightest doubt was expressed or entertained of Lydia's goodwill and desire to please, my uncle did not relish his gruel and panada. Mrs. Rogers suggested a little difference in the proportion of the ingredients, the method of mixing, and the time of boiling; and cook tried again, but without success; the basin was carried down, with only a spoonful or two gone. Next time Mrs. Rogers ordered the saucepan and ingredients into her own room, and prepared the mess herself. My uncle knew nothing of what had passed, but he relished the mess. When Lydia saw the empty basin brought down stairs, she burst into tears, and said it was very hard she could not please master, so many gallons of gruel as she had made for other people; and she was sure she did it exactly as Mrs. Rogers told her. Mrs. Rogers was quite disposed to conciliate, and only anxious to consult the sickly appetite of her honoured master; so, with a little soothing and humouring, sometimes doing the mess herself, and sometimes standing by and seeing Lydia do it precisely according to her directions, the days of gruel and panada were got over without any further collision of the rival powers. But alas! the introduction of beef-tea occasioned a new fracas.

No sooner had the physicians authorized this improvement in the diet of their patient, than a discussion arose as to the proper method of preparing the nutritious meal. One party—I forget which—insisted, that to draw out the goodness of the meat, it must be set on in cold water, and kept simmering for at least two hours; the other contended that tea was not a decoction, but an infusion, and that the goodness was to be extracted by simply pouring boiling water over the meat, and letting it remain a given time. Each appealed to authority to settle the controverted point, and Glasse and Kitchener were placed in hostile array against each other; Mrs. Rogers, the housekeeper, and Lydia, the cook, avowing themselves the respective partisans of each. The rattling of the fire-irons, and the jar of the basin, indicated that it was not with thorough

good humour that Lydia set about preparing the broth on Mrs. Rogers's plan, observing to the housemaid, that "it was fit Mrs. Rogers should have her own way, being the housekeeper, and that she should give up, being only a poor servant; however, the proof of the pudding was in the eating, and it would be seen whether master relished beef-tea made in that way." It happened that master did not relish it; and for the next meal Lydia enjoyed the triumph of preparing it her way, but succeeded no better. My uncle sipped a spoonful or two, and then returned it, saying, "I suppose it is the fault of my own whimsical palate; but beef-tea does not seem the same thing that it used to be when old Sally made it." My uncle's own man, to whom this remark was made, promptly resolved that old Sally's skill should be called into requisition. He posted off to old Sally (now Mrs. Dobson) to beg a written recipe for making beef-tea. "To think that master should remember any thing that I did for him!" exclaimed the delighted ex-cook—"to be sure, I will write it down with the greatest pleasure; or I know what I would rather do, if I thought Mrs. Rogers and Lydia would not take offence—I am sure master would not—I would step up to the Hall, and make it myself, just as I used to do." "Oh, they will not be offended, I'll answer for it," returned William, "they are so concerned for master to have what he can fancy; I am going now to order a set of calf's feet, for Mrs. Rogers to make some jelly, which she says she is sure he will like better than beef-tea." Thus encouraged, Mrs. Dobson proceeded to the kitchen, where she was kindly welcomed by her old associates. Before she could introduce her special errand, Lydia opened the subject herself, appealing to her, as we are all too apt to appeal to the judgment of others, in the hope of having our own sentiments or practices confirmed, rather than with a simple desire to learn the right way. "Do tell me, Mrs. Dobson, will you be so good, how long beef-tea ought to simmer? for I want to do it exactly your way." Before she could answer, in came Mrs. Rogers, to inquire whether the calf's feet were come, as she wanted to begin her operations; but seeing Mrs. Dobson, she too took the opportunity of inquiring her method; "for," said she, "none of us can hit master's fancy in it just as you used to

do. I think, you do not simmer it at all, do you?" "No, Ma'am; I first chop up the meat as fine as sausage meat, and pour boiling water to it." "I thought so," exclaimed Mrs. Rogers; for even she, though a person in authority and of considerable experience, was pleased to have her way confirmed, as she thought; "and how long do you let it steep?" "Not at all, Ma'am; I make it boil up as quickly as possible, and let it boil fast for twenty minutes. If you please to give me leave, Ma'am, I'll make some; and then, if master likes it, Lydia will know exactly how to do it for another time." Her offer being accepted, Mrs. Dobson set to work, and presently produced the article required. Both Mrs. Rogers and Lydia looked on with incredulous wonder at this presumptuous deviation from the prescribed rules of old authorities, and almost doubted the success of the experiment, even when demonstrated to their very senses. My uncle, however, had no doubt about it; for, without being apprized of the change of method or maker, he readily took the result, and enjoyed a hearty meal, and continued to take it thus prepared, until he was sufficiently recovered to partake of more substantial food. Now, that his taste was gratified, and his health promoted by having suitable nourishment, was, I doubt not, highly satisfactory to both the good women: perhaps also they were very well pleased to find themselves in possession of a piece of useful practical information; yet those who know much of human nature will be rather grieved than surprised to learn that a basin of beef-tea, prepared on the new system, was scarcely ever sent up without some ill-natured fling at new-fangled notions; that when, on his recovery, my uncle made each of the servants a little present in acknowledgment of their faithful and devoted attentions, Lydia said, "she was very sorry she did not know how to make beef-tea to his honour's satisfaction;" and that a foolish feeling of rivalry was called into exercise whenever Mrs. Dobson happened to call at the house, or if any of the family happened to mention any of her rules and practices. "Lydia," said my uncle on the occasion first referred to, "I thank you for your good-will and desire to please; and I assure you, that every one who serves me knows how to give me satisfaction, by doing what is required of them in the best manner with

which they are acquainted, and willingness to learn and adopt a better when it is set before them. An unwillingness to do this proceeds from littleness of mind, pride, and self-conceit; it is a bar to improvement and peace of mind in the individual, and throws an ungracious manner even over endeavours to please, that renders the services performed, if not less valuable, at least less agreeable to others. Let me advise you, my good girl, to be content with doing your best, and, endeavouring to improve, be thankful to all who will teach you; and never admit the silly vanity that would make you ashamed to learn, or that would grieve because any one knows better than yourself."

"Two of a trade can never agree."—There is something very ill-natured in this adage, and one could wish that there was nothing in real life to confirm it. In the present day of extended commerce, intelligence, and liberality, there is less of this spirit of selfish exclusiveness, especially in large towns, where, from the number of competitors, a fair competition can be kept up to the general advantage, without exciting personal rivalry and hostility. But in small towns and villages, the exclusive privilege of administering the draught and bolus to her Majesty's subjects, of initiating the young into the mysteries of the grammar and ciphering-book, of building the houses, of shoeing the horses, or of using a saw, plane, and chisel within a certain district, seems still to be claimed as a sort of hereditary right. Hence the person who, however unintentionally and unconsciously, in the slightest degree interferes with the old state of things, is regarded as a lawless usurper, and those who countenance his attempt are looked upon as withdrawing a sort of legal allegiance from the old standards, however clearly it may appear that the increasing demands of the neighbourhood justifies and requires an increasing supply. My uncle's neighbourhood was not free from this spirit of mean, selfish jealousy, though he did all in his power to counteract it; and as both his judgment and example were much looked up to, it may be hoped that his efforts were not wholly unsuccessful.

There were the two millers, White and Simpson, men who could agree with every body in the parish except with one another; but each always seemed to grudge when he saw the other's cart go

through the village loaded, and always had a jeer for the carter, if it contained only a sack or two. If any one happened to notice Simpson's fine strong horses, or the fine fatting pigs in his sty, White was sure to express a wonder whose grist it was that fed them; or if Simpson chanced to be seen going afoot, White would inquire whether trade was come to that, that he could not afford to keep a horse? while Simpson would contrast the fine-lady appearance of Mrs. White and her daughters, with that of his own frugal, notable dame, and say, it was all very well, if the finery was paid for; for his part, he was sure he did not care if White could afford to dress his wife in gold and silver—it was no difference to him; and yet either of them would take it exceedingly unkind, and resent it as a personal affront, if he knew that one of the farmers sent a load of corn to the other's mill.

There was Smith the carpenter, so full of business, that he knew not which way to turn, yet he would rather disappoint a customer, by undertaking more than he could possibly perform, than either give up a job, or employ poor Wilson as a journeyman, because Wilson would not be bound down never to undertake work on his own account. Smith had prospered in business, and though he began life without a shilling, had by industry and frugality scraped together enough to purchase land and build several houses. There was no doubt he was every year adding to his property. Poor Wilson, who had been his fellow-apprentice, was an equally honest and industrious man, but had not been blessed with equal prosperity. He had several times been laid aside by severe illness: he had a very numerous dependent family, and he had sustained some heavy losses by bad debts. The poor fellow could hardly lift up his head; and his wife and children, though always neat and clean, were scantily fed and clothed. He could not now undertake a large building job, for he had not capital for materials and labour; but he was very thankful to get such a job as he could manage himself with the assistance of his own boys; and when he had not such a job in hand, and his old fellow-apprentice was known to be busy, he would have been glad of occasional work from him; but Smith, though to his own inconvenience, absolutely refused to give him a day's work, at a time when his family really wanted bread, unless he

would engage entirely to give up working on his own account. My uncle happened to hear of the distress of Wilson's family: he inquired into the circumstances, employed him in building a barn, and by advancing a little money, set the poor fellow on his legs again, and had the pleasure to see a worthy family once more prospering. There was plenty of work in the neighbourhood for Smith and Wilson too; but Smith always seemed to look upon all that was earned by Wilson as so much bread taken out of his own mouth. When Wilson began to thrive again, I remember my uncle cautioning him against indulging the same grasping, monopolizing spirit. "Live and let live," he would say, "is the maxim for a Christian tradesman; and in this respect act and feel towards others as you would wish others to do to you; or, though you may work early and late, and lay your plans with wisdom, and husband your resources with care, ay, and even though you should have the success at which you aim, you cannot expect to have the blessing of Him whom we call our common Father, and who will have us seek and delight in the welfare of our brethren as our own. 'Look not every man on his own things, but every man also on the things of others.'"

There were the two errand carriers, Clark and Norris, who went to the neighbouring town on alternate days. Instead of leaving things to take their fair chance, each of these men regarded the other as a rival, and would throw out hints of his carelessness and want of punctuality, and endeavour to persuade the neighbours, that if they wanted their commissions faithfully executed, they must never intrust them to him. If this did not succeed, and people sent their errands on the day that best suited them, the carrier who failed of the commission would set them down in his black book, as he called it, and take some early opportunity to show his spite, and inconvenience them, especially if he could spite his rival at the same time. Clark left behind him a basket of fish for the publican, because he learned that it had been brought the day before to go by Norris, but was five minutes too late. The fish was spoiled, and the party for whom it was bespoken disappointed. Norris thought he would be even with him, and having been desired by some person, who thought it was all the same concern, to call the next day at the turn-

pike, and take up three passengers, who were to come there by the stage-coach, he never said a word about the matter; so Clark lost three passengers, and they were obliged to walk four miles in the rain. These things happened so often, that the neighbouring gentry were quite out of patience, and determined to support another carrier, who should run every day.

There was old Martha Scott, a selfish old crone, that had in her possession a famous secret for the cure of the jaundice. She charged five shillings for the stuff, though she often boasted that it did not cost her two-pence. She was in high repute far and near, and by all accounts, I suppose her remedy was pretty successful; though, perhaps, many of her patients only fancied they had the jaundice, when their complaint was nothing more than a little bilious irregularity, which might have been set to rights by any common medicine, with proper attention to diet. However, if her remedy was safe, and people chose to give it a trial, there was no blame due to her for making a little profit of it; but then, if it really was as good a thing as she represented it to be, she ought to have considered the knowledge of it a talent intrusted to her for the good of others as well as—indeed more directly than—for her own; and she should have conscientiously endeavoured to preserve and extend so valuable a benefit. But, no: not upon any account would old Martha communicate her secret; even to her own daughters, or write it down (though she could write) for fear they should find it. If by chance they came in when she was preparing the medicine, and saw any of the ingredients, she would directly collect a number of other things, mix them all together, and then throw away the compound, and laugh at them for imagining that they had detected her secret. Martha was a selfish old woman, and as capricious as she was selfish. I question whether she would not have suffered half the people in the parish to die of the jaundice, rather than give her remedy to a poor creature who could not raise five shillings to pay for it, or rather than run the hazard of any other person finding it out, and getting the five shillings instead of herself. Then she kept up a constant spirit of jealousy and manœuvring among her own children. She would coax them to do any thing for her, not as an act of filial duty

resulting from genuine affection, but by promising to put that particular child in possession of her secret, to the exclusion of the others; or, if they displeased her ever so slightly, she would threaten that her secret should die with her, rather than it should benefit those who offended. Whether Martha was most sincere in her promises or her threatenings cannot now be ascertained; for, instead of giving up her secret on her dying bed, as she said she should do, she fell down in a fit, and never spoke more, leaving no vestige behind her of her famous nostrums. Each of her daughters professed to know a great deal about it, and tried her skill in guessing at the preparation; but some said it did not taste exactly the same, and some said it was not quite the same colour as what the old woman used to make: very few people were inclined to try its efficacy. Those afflicted with the disorder again resorted to the regular doctors, and old Martha's three daughters, after spending the best of their time in vainly searching after the secret, instead of devoting it to really useful and profitable employment, closed a life of discontented penury in the parish workhouse.

"See," said my uncle, "how selfishness defeats its own ends. 'There is that withholdeth more than is meet, and it tendeth to poverty.' Those who might secure general respect and gratitude as benefactors of their race, often expose themselves to execration and contempt by their niggardly spirit. Experience will generally prove, that what is best for our neighbours is best for ourselves. Those who, on Christian principles, abound in liberality, are often prospered in a remarkable manner; while those who selfishly grasp at undue advantages, generally fall short of what they might conscientiously and creditably have ensured."

I used sometimes to witness a lively but disgusting picture of petty jealousy, when, accompanying my uncle in some of his walks of benevolence, we looked in upon two old women who lived rent free in one of the cottages, and received also from my uncle a small weekly pension. This arrangement had been petitioned for by themselves, each having a little furniture, which, put together, they thought would make them very comfortable. It was also a matter of economy to make one fire serve them both, and of mutual comfort that they should be

society for each other; and that, in case of illness, they should be able to assist one another. All this seemed very promising, especially as they were both professors of religion; and it might therefore be hoped that they would in all their intercourse be actuated by a spirit of Christian love, forbearance, and conciliation, and that they would be mutual helpers of each other's faith and consolation.

Mrs. Rogers was directed by my kind uncle to see that any deficiency in the furniture of the little dwelling should be made up; and that, in every respect, the comfort of the old women should be kindly cared for. In addition to their weekly allowance, which was generally given to them by my uncle himself, they often received supplies of provisions at the hall; and on the approach of winter, were always furnished with warm clothing and bedding. What could these old women have to do but to make each other comfortable, to pray for their kind benefactor, and to pour out their souls in gratitude to God, who had loaded them with benefits? But the very reverse of all this was the case: they were just as amicable as Samson's foxes, fastened together with a firebrand between. If when we called they were both at home, we were sure to overhear some altercation about the door or the window being shut or open, or whether the saucepan boiled too fast or too slow, or whether the largest share of the fire was engrossed by Molly's tea-kettle or Betty's coffee-pot; and it was with evident difficulty that the scowling brow could be smoothed down, and the harsh voice softened to the tones of respectful complacency with which to welcome their benefactor. If one of the inmates happened to be from home, the other was eager to embrace the opportunity of throwing out some insinuation to her disadvantage. Molly would tell us that "Betty was much better off than herself, having an uncle who always sent her five shillings at Christmas, and had once given her a new gown,"—by the way, I should think we heard the story of this gift till the gown must have been worn to tinder,—"and, if she should happen to outlive him, would most likely leave her the rent of two cottages; while she, poor creature! had not a soul to care for her besides his honour; and if it had not been for him, she might have been starved long ago." Betty, on the other hand, would com-

plain that Molly put upon her the hardest part of the house cleaning, and took more than her share of the provisions she received at the hall to divide between them. My uncle would sigh over the vain attempt to make people happy who carry about with them the seeds of malignity, discontent, and wretchedness. He said he was sometimes tempted to give them up in disgust, and withdraw his bounties from them; but he checked himself when he remembered our Father in heaven, who is kind to the evil and the unthankful: "but," said he, "if death does not find as complete a change in the tempers and dispositions of these two old women, as it will make in their state, notwithstanding all their professions of piety, which I hope are not insincere, they would carry discontent and envy even into heaven itself, if they could be admitted there."

There was a cousin of my uncle, and of course of my father also, only as she lived in my uncle's neighbourhood, and I only met her at his house, I seem to forget her relationship to my father. She had been left a widow in early life, with two sons and a daughter, and a very slender provision for their maintenance and education. By strict economy and good management, she maintained her station in society, kept up a respectable appearance, and gave her children a good education, without reducing her little principal. She was a truly estimable woman, highly respected by all who knew her, and, as was justly due, tenderly beloved by all her children; and yet even in that highly-favoured and happy family a root of bitterness sprang up, and occasioned much anguish of mind to the tender parent, and threatened a painful alienation between the long united members of her family. It was a spirit of petty jealousy excited and fomented by those with whom the young people became connected. One son had been brought up to the medical profession: the course of his education, and the furnishing his library, had necessarily been expensive, and the devoted mother had strained every nerve to afford him the means of qualifying him to take a high standing in his profession. She had done her utmost, and, in justice to her other children, she could do no more, either by purchasing for him a practice, or furnishing a house. He was compelled to work his way upwards, by remaining several years as assistant, and

then as junior partner to a gentleman in high practice; and during that time, by frugality and self-denial, considerable to a young man, but bearing no comparison to what his mother had practised for the sake of her children, to obtain the means of furnishing a house. He felt it tedious to continue in a subordinate sphere, and to wait for the fulfilment of his cherished visions of domestic bliss, and he was sometimes induced, ungenerously, to think that his mother might do more to forward his views, and that if he had been the favoured child, she would have done so.

The daughter was about to be married to a young schoolmaster, who was just entering on his profession with encouraging prospects, but with little property. The mother drew largely on her resources for assisting the young couple in their outfit, which of course was expensive, as the establishment on which they entered was considerable. The other son was apprenticed to a trade, and at the end of his time the mother exerted herself almost beyond her power, in advancing a capital for setting him up in business.

Now my uncle had always been the friend and counsellor of this family, and at one time he observed on the countenance of all an unusual cast of depression and reserve. Happily for them he did so; for his friendly interference was the means of nipping the evil in its bud. He invited the confidence of every member of the family, and found that each, by some sinister influence, had been taught to entertain an idea that the others enjoyed a larger share of the mother's favour and exertions. In this instance there was good sense and good principle to work upon; and it was no difficult task to convince them that, if one had received an expensive education and library, another a distinct sum of money, and a third a valuable supply of household goods, they were all equally sharers of their mother's bounty as they were in her tender affections, and the difference in the mode of her kindness was justly and kindly adapted to their several circumstances. Humbled and grieved on convicting themselves of having even for a moment admitted so unworthy a feeling, each discovered a willingness to take home the largest share of blame, and to acquit the rest. The fault was deplored before God, and forgiving mercy and hallowing influences sought in

earnest prayer. The bond of union was happily cemented, the widowed mother eased of her cruel burden, and to the end of her days she was soothed by the delightful sight of a family dwelling in unity, or contending only which could do most to promote the comfort of her who had so completely laid herself out for their welfare.

But I must come to a close. The numerous unhappy instances of petty jealousy that press themselves on my recollection can barely be hinted at. There was the village apothecary, jealous of his reputation: he had pronounced it utterly impossible that young farmer Round should recover from an illness—impossible, indeed, that he should survive the night. This opinion he had very confidently expressed to several persons, among the rest to uncle Barnaby. My uncle had a great respect for the young man, and desirous of knowing the state of his mind under these solemn circumstances, resolved to pay him a visit. He was readily admitted, and had a pleasing conversation with the sick man; but, though highly satisfied as to the primary object of his visit, he was not satisfied at being informed by the family, that the doctor had told them they might give him whatever they pleased, for that he could not live twenty-four hours. He suggested the propriety of calling in further advice: to this the apothecary somewhat reluctantly consented, still maintaining that the case was perfectly hopeless. It might be so; yet my uncle pleaded for the adoption of the measure, as a satisfaction to the family: he more than pleaded; he went himself and fetched an eminent physician from the county-town. This gentleman considered the case very alarming, yet suggested a somewhat different mode of treatment, at which the apothecary, a man of hasty temper, affected to sneer as perfectly useless. The case remained for some days in a state of equipoise; the experienced physician discerning enough to stimulate hope and encourage exertion, yet not awakening expectations that, after all, might be disappointed. The apothecary meanwhile maintained that there was not a single indication of amendment, not a chance of recovery. My uncle remarked that the patient had already outlived his expectations, and reminded him of the old proverb, "While there is life, there is hope." The confident practitioner could not but admit that the man was alive, and said that some

persons were endued with a peculiar tenacity of life; but added, that recovery was as impossible as ever. "With God all things are possible," replied my uncle. "Yes, to be sure; God can raise the dead; but that is nothing, in the present case. If ever this person recovers, the science of physic is not worth a single straw." However, he did recover, and is alive to the present day, and ascribes his recovery, as do all his family and friends, under the blessing of God, to the skill and care of the physician. But the testy apothecary was offended with the man himself, and all his family, and the physician, and uncle Barnaby, and every body that expressed pleasure in the unexpected recovery. "Did you ever," said uncle Barnaby, "see a more exact counterpart of the petulant prophet Jonah, who would rather have seen the destruction of Nineveh and all its inhabitants, than hazard his own professional reputation, though the God who sent him had taken the case into his own hands?" Jonah iv.

There was Miss Berkeley, the rich old maid, at Fairy Dale, who turned away her gardener, an honest, industrious man with a large family, for a paltry bit of jealousy and pride about a flower. At that time, the numerous beautiful varieties of geraniums, now so common, were altogether unknown. There was the horseshoe-leaf, the variegated leaf, the ivy leaf, the Bath beauty, and the spice geraniums; and the gardener who could produce all these was reckoned skilful indeed. Miss Berkeley's gardener was among the first who obtained new varieties by raising seedlings. The pursuits of a parent generally give a tinge to those of his children; and John Hill's children sought their amusement in raising flowers. From among a large box of seedlings, one produced a perfectly white blossom: this was reckoned a great curiosity and a great prize. The boy, who was a scholar in my uncle's school, wished to make him a present of the flower, as an expression of his gratitude. My uncle knowing Miss Berkeley to be a great flower fancier, took a slip or two, and recommended the boy to present the flower to her. He did so. The lady was highly delighted, and prided herself on having a variety which she considered perfectly unique. The slips which my uncle had taken soon overtook the parent plant in size and beauty. Some one, who happened to have seen them, mischiev-

ously carried the report of them to Miss Berkeley, intending to mortify her foolish pride, but little thinking she would indulge a vindictive spirit to the injury of poor Hill and his family. She, however, carried it so far as to turn the poor man from her employment in consequence. My uncle remonstrated and interceded on his behalf, but she was inexorable. He then, out of mere compassion, gave occasional employment to the persecuted family; and ultimately John Hill became his head-gardener, and was for many years a most trusty and valuable servant.

There were the two families of Seymour and Giles, who both wanted the same pew at chapel: neither would give up to the other; and both absolutely stayed away from public worship, rather than sit any where else. A good man, who had more wisdom and grace than either, and who with his family occupied the fellow-pew to that in question, spontaneously proposed to give it up, and content himself with any other accommodation that could be afforded him. So the matter was arranged. He who came in such a lovely spirit of humility, I doubt not experienced much of the promised blessing, and was satisfied with the goodness of the Lord's house, even of his holy temple; and I would fain hope that those who came in so improper a spirit were taught to imitate so amiable and holy an example.

There were, even in the Sunday-school, teachers looking shy upon one another, and some declining to continue their attendance, because they could not be superintendents, or because they were not willing to take the lower classes. The children were neglected, and the school going to decay. Uncle Barnaby, who was much interested in the cause, invited them all to tea, and talked with them of the declaration of their Redeemer, that the most lowly and humble of his disciples was the greatest in his kingdom, and of his own lovely example, who pleased not himself, and of the value of the souls of the children, and their preciousness in his eyes, until they were all melted and humbled, and went afresh to their work quite willing to become the servants of all. Envy is best removed by humility and love.

There was Mr. Brown, who refused to assist in the formation of a benevolent society, because Mr. Jones had been consulted before him. There was Mrs.

Richards, who would not become secretary to a Bible association, because Mrs. Williams was treasurer, which she fancied was the more honourable office, and ought to have been committed to her. There was Mr. Cook, who refused to attend a missionary meeting, though in his heart he wished to go, and wished to be one of the speakers, but stayed away simply because he had not received a special invitation, which he regarded as a personal slight, though no one else had received or expected such notice, but all considered the advertisement and handbills of announcement a sufficient invitation to all true lovers of the cause. This piece of folly uncle Barnaby reprov'd in the words of the excellent Matthew Henry, with which I shall conclude. The passage occurs in his commentary on Judges viii. 1.—The Ephraimites offended at not being invited to begin the attack upon Midian.

“Why did not the Ephraimites offer themselves willingly to the service? They knew that the enemy was in the country, and had heard of the forces that were raising to oppose him, to which they ought to have joined themselves in zeal for the common cause, though they had not had a formal invitation. Those seek themselves more than God, that stand upon a point of honour to excuse themselves from doing real service to God and their generation.” C.

MEANS AND USES OF KNOWLEDGE.

No. I.

Addressed to Young Men.

THE melancholy fact that eminent knowledge sometimes exists in connexion with great wickedness, has not unfrequently induced pious men to consider it as hostile to religion. This is a great practical error. It was not the intention of Paul to discard what was sound, when he spoke of the “science falsely so called.” On the contrary, sound knowledge and true religion are divinely wedded as everlasting companions; and what God hath thus joined together, ought not to be put asunder. The holy angels excel in knowledge; yet all their intellectual acquaintance with the works and ways of God, serves only to swell their bosoms with adoration, gratitude, and praise. Their growth in knowledge is growth in religion. The more they know, the more they love.

The same is the legitimate tendency of sound knowledge amongst men. Unless effectually prevented by sin, it will lead the mind forth to God, and introduce it rejoicing into the paradise of his glories.

But I am not now to speak at length upon the connexion between knowledge and piety. It is sufficient to say, that they are intimately related; that the one is to subserve the other, as they shall grow and flourish together in heaven, to all eternity. This is the great and final use of knowledge; the ultimate motive to obtain it.

If you would obtain knowledge, you must love it. What we earnestly set our hearts upon, we usually make effectual efforts to obtain. When there is a will, there is a way. In the language of the wise preacher, you must cry after it, lift up your voice for it, seek it as silver, and search for it as for hid treasures. I would then proceed to some more particular notice of the means and uses of knowledge.

The knowledge in question is not to be obtained merely by light miscellaneous reading. Newspapers and other periodicals, excepting such as are devoted to grave discussions of important principles, together with every species of the lighter reading, should be despatched in moments of relaxation, and never occupy the place due to severe study. Nor is it to be obtained by only attending lectures. These, together with discourses upon the sabbath, etc. afford invaluable means of instruction; but they do not supersede the necessity for the direct personal application of your own mind to the sources of knowledge.

If you would secure the contemplated knowledge, you must

1. Believe that you can do it. It is a true Latin proverb, *Qui credit, posse potest*—"He who thinks he can, can." Multitudes of minds sleep in everlasting rust and oblivion, just because it never occurred to them that they could help it. It is said of Dr. Paley, that, when a boy at college, wasting his time in indolence and pleasure, one of his companions entered his room at a certain time, and said to him rather rudely, "Paley, I have just been thinking what a fool you are to waste your time and means thus, when it is in your power, by application, to render yourself eminent." This suggested to his mind, that it was indeed in his power to do it; and from that moment he resolved to pursue knowledge with all his might.

The consequence is, that, although not the very greatest or most accurate of philosophers, yet the glory and influence of his intellect have spread over the civilized world, and will last for ever. This is a distinguished example, but it illustrates a general truth, applicable in some measure to every young man.

2. You must fully determine to do it. No person accomplishes anything good and important, which he does not first determine to accomplish. And in order to make your mind up to it strongly and effectually, take a wide survey of the motives. Think of the happiness to be derived from an elevated exercise of your intellect, compared with that of indolence and sensuality. Think of the exquisite satisfaction of feeling that your mind is growing in vigour, in knowledge, in excellence, in whatever elevates and adorns; contrasted with the painful consciousness, that you are wasting your mental existence and burying your talent in the earth. Compare some of those around you who have pursued the former course, with others who have pursued the latter, through their youth up to the present time, and say which you prefer.

Think of the consequences to your children, if you have or ever have any. To possess sound knowledge, wherewith to inspire and direct their young minds, is the best inheritance with which you can bless them; how much more valuable is it than riches! The most useful and distinguished men are usually the sons of parents who were either without wealth, or who taught their children not to stake their happiness upon it; but who possessed knowledge, and taught it to their children, and instructed them to prize it above all other riches. The heirs of large wealth, whose parents are ignorant and vain-souled, are usually ruined. If many of those parents who are toiling hard to swell their estates for their children, already too large for their good, would devote half their zeal to qualifying themselves to influence and direct them in the pursuit of knowledge and moral excellence, it would be immeasurably better for them. It is not enough that they intrust them to competent teachers. This is, to be sure, of the first importance; it is a most miserable policy to seek merely for cheap instruction. Better is it for the parent to make great sacrifices, for the sake of securing the best teachers for his

children. But this is not sufficient. Unless the parent himself possesses sufficient knowledge to appreciate its value, to inspire his children early with a love for it; to watch their progress, superintend their early reading and have some oversight of their education, they must suffer great and often irreparable loss.

Think, too, of the extensive good you may do to society, by the power of a disciplined, enlarged, and well-furnished mind. Especially think of your own everlasting destination. Consider the guilt of misimproved or wasted intellect. Remember the doom of him who buried his talent in the earth, and the exaltation of him who had been faithful over a little. Knowing that the present growth and direction of your mental powers, is to affect your character and condition in far distant ages, even when the heavens and earth shall be no more, let all the immense motives of eternity, in connexion with those of time, press you to an effectual determination to make the most of your powers and opportunities.

3. Do not expect or attempt too much at once. The growth of mind is gradual and imperceptible. You must not allow your mind to be cloyed, by receiving faster than it can digest; or dissipated, by fleeing from one thing to another; or discouraged, by seeing so much to be done; or rendered superficial, by too much haste. Remember that if you are in the school of Christianity, you are to be a learner as long as you live; therefore set out as you can hold on. Under a Christian course of mental discipline, the mind is scarcely conscious of its own progress. Like the oak, whose sure and stately growth is seen only by the lapse of time, it moves steadily upward till overtaken with age and disease, when it only waits the hand of death to smite down the incumbance of all that is mortal, that all that is immortal may be transplanted to heaven, where it may strike its roots deeper and send wider its branches for ever.

4. Ascend the steps of knowledge in the order of nature, and according to their importance. Necessity compels this in childhood, but the rule is frequently violated afterwards. Review the ground which you have passed over at school; begin where you there left off; and first pursue those branches, which have the most important connexion with your calling.

With writing, book-keeping, etc. every

young man expecting to pursue business, will of course make himself early acquainted. Arithmetic, English grammar, composition, and geography, are next in importance to every young man, both as mental discipline and as knowledge. For the sake of some variety and relief to your mind, I would advise you to pursue two of these in connexion. For instance, English grammar and composition may occupy some portion of your time, while you are pursuing other branches.

Go thoroughly into the whole of vulgar arithmetic, if practicable. It will serve to impart vigour, acuteness, patience and perseverance to your intellect; and will always be a source of valuable science. Then take up the study of geography systematically, and pursue it till you are well acquainted with the most important particulars in the natural features, the climate, the productions, the governments, the state of learning, the habits and the religion of every country. This will introduce you to the world, and add to the knowledge and interest to be derived from almost every book, newspaper, discourse, or conversation.—*Hubbard Winslow.*

STRUCTURE OF SHELLS.—No. III.

THE shape of the shell depends altogether on the extent, particular form, and position of the secreting organ. On its exclusion from the egg, the animal has already a small portion of shell formed. The simplest case is that in which this rudiment of a shell is a concave disk. We may conceive the animal, covered by its mantle, to expand the border of this organ, and extend it beyond the edge of the shell, where it then forms a new layer of shell; and this new layer, being applied to the inner or concave surface of the original shell, will, of course, extend a little way beyond its circumference. The same happens with the succeeding layers, each of which being larger than the one that preceded it, projects in a circle beyond it; and the whole series of these conical layers, of increasing diameters, forms a compound cone, of which the outer surface exhibits transversed lines, showing the successive additions made to the shell in the progress of its increase. Of this form of structure the limpet is an example.

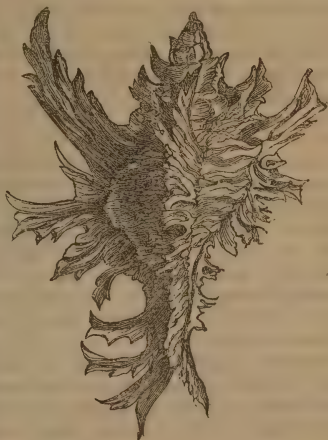
In by far the greater number of mollusca that inhabit univalve shells, the formation and deposition of the earthy materials do not proceed equally on all sides, as happens in the limpets. If the increase takes place in the front only, that is, in the fore part of the mantle, the continual deflexion which thence arises, necessarily gives the shell a spiral form, the coils being simply in one plane. Most commonly, however, the deposit of shell occurs laterally, and more on one side than on the other; hence the coils produced descend as they advance, giving rise to a curve, which is continually changing its plane.

A common snail has a shell of this form. And here another circumstance is worthy of remark: in consequence of the situation of the heart and great blood-vessels relatively to the shell, if we consider the animal as resting on its foot, the head being in front, the left side of the mantle is more active than the right, so that the lateral turns of the spiral are made in the contrary direction, that is, towards the right. There are, however, a few species, in which, in consequence of the heart being placed on the right side, the turns of the spiral are made to the left. Such shells have been termed *sinistral*, or reversed; but this form seldom occurs in the shells of fresh-water or land mollusca.

Already instances have been mentioned of the benevolence of the universal Father, and here may be added another. From the mode of forming shells, just described, it results that the apex, both of the simple and of the spiral cone, is the part which was formed the earliest, and which protected the young animal at the moment of its exclusion from the egg. This portion may generally be distinguished by its colour and appearance from that which is afterwards formed. The succeeding turns made by the shell, in the progress of its growth, enlarging its diameter as they descend from the apex, form, by degrees, a wider base. During the growth of the animal, as the body extends towards the mouth of the shell, its posterior end often quits the first turn of the spire, and occupies a situation different from that which it had originally. In these cases, the cavity at the apex of the spire is filled up with solid calcareous matter, not inferior in hardness to that of marble.

It sometimes happens, that, at different periods, a sudden development takes

place in particular parts of the mantle, which, in consequence, become rapidly enlarged, striking out into long slender processes. Every part of the surface of these processes has the power of secreting and forming shell, so that the portion of it, which they construct, being consolidated around each fleshy process, must necessarily have at first the shape of a tube closed at the end. As fresh deposits are made by the secreting surface, which are in the interior of the tube, the internal space is gradually filled up by these deposits; the process of the mantle retiring to make way for their advance towards the axis of the tube. In the course of time, every part of the cavity is obliterated, the process of the shell becoming entirely solid. Thus originate the many curious projecting cones or spines which several shells exhibit, and which have arisen periodically during their growth from their outer surface. In the murex these processes are very numerous.



Remarkable changes also occur in the interior of the shell at different stages of its growth. On the inner surface of the mitra, the volute, and other shells of a similar kind, a layer of a hard semi-transparent calcareous material, having a vitreous appearance, is deposited. The thickness of the layer which thus lines the cavity of the shell is greater as it approaches the apex; and where the spire is much elongated, or turrit, as it is called, this deposition entirely fills the upper part, which, in the early condition of the shell, was a hollow space with

thin sides. What then is the purpose answered by this deposit? Evidently to give solidity and strength to a part which, by remaining in its original state, would have been extremely liable to be broken off by the action of the sea.

In other cases, an interesting expedient may also be observed. Instead of fortifying the interior of the apex, by a lining of hard shell, the animal suddenly withdraws its body from that part, and builds a new wall or partition across the cavity, so as to protect the surface thus withdrawn. The portion of the shell thus abandoned, being very thin and brittle, and having no internal support, soon breaks off, leaving what is called a decollated shell.

The young of one genus, (*magilus*), has a very thin shell of a crystalline texture; but when it has attained its full size, and has formed for itself a lodgment in a coral, it fills up the cavity of the shell with a glassy deposit, leaving only a small conical space for its body; and it continues to accumulate layers of this material, so as to maintain its body at a level with the top of the coral to which it is attached, until the original shell is quite buried in this vitreous substance.

HAPPINESS.

WHETHER we look at man in his social or public capacity; in his civilized or barbarous state; in his childhood, maturity, or old age; the attainment of happiness appears to be the chief object of his life; and it is that to which all his energies are directed. But yet, how few, how very few, can truly be said to possess this blessing!

The only satisfactory reason we can assign for this, is that men are continually desiring objects which they do not possess, and which, perhaps, they can never obtain. "Covetousness, which is idolatry," is at the root of all the evils which afflict mankind; and so long as this passion is suffered to exist, so long must the breast be a stranger to true and solid happiness. For, while it yields little or no satisfaction in itself, it tends to diminish that "peace which passeth all understanding," or altogether excludes it from the soul.

"We cannot serve God and Mammon." "In contentment there is great gain;" and it has been truly observed that "perfect happiness can alone be obtained by perfect contentment."

This life is as nothing, yea, it is "vanity and vexation of spirit;" and its enjoyments are so short and transitory, as to leave nothing to the mind, but the feeble recollection of what it once so imperfectly possessed. The choicest earthly delights are transient, like the tender flower, blooming to-day, and to-morrow, withered and gone. The health which is now apparently most confirmed, may soon terminate. The greatest strength may speedily decline, and change into weakness and decay. The highest and best secured honours may shortly depart, and the most abundant riches may fail, leaving the man, who derived his enjoyments from them, both poor and comfortless.

In a word, wealth, ease, honour, power, and even domestic comfort, all hang upon a fragile thread, and when this is broken, the devotee finds himself among the most guilty and miserable of men.

But we might all be in the enjoyment of real and substantial happiness, if we could obtain that peace which our Saviour left his disciples. It is not a peace which the world can either give or take away, and is something of which it cannot even have cognizance. It is a peace, therefore, which is independent of it; it so far surpasses the understanding of man, and it will eventually survive his existence. It is a peace which is not affected by the vicissitudes of time, but extends beyond it, and, leaving its recipient unmoved by the dissolution of empires and kingdoms, will survive the crash of worlds. While the fashion of this world is passing away, and while all around it, with the pleasures and enjoyments of man, are crumbling into dust, it will tower far above all, and issue in everlasting triumph and glory.

The Christian need therefore never suffer the cares of this life to disturb his peace of mind; for the Lord withholdeth no good thing from those who walk uprightly. "Let not your heart be troubled: believe in me," was the benignant expression of our Lord when upon earth. He has also promised that if we seek first the kingdom of God and his righteousness, all things necessary shall be added unto us. But though they are promised to us, we are not to set our affections upon them, and they ought not in our minds to bear any proportion to the spiritual blessings which we enjoy through Christ.

W. S. C.

BLEACHING.

HAVING explained, in our last volume, the manner in which various woollen and cotton goods are manufactured, we may now proceed to describe the process of bleaching. This may be performed in various ways. Its object is evidently to destroy the natural or assumed colour of animal and vegetable fibres. Many of the fabrics used for cloth are required of a white colour; and in those which are dyed or printed, bleaching is also required. The vegetable substances which come into the hands of the bleacher, are chiefly cotton, flax, and hemp; the animal, wool and silk. The manner of treating these two classes is somewhat different, and a distinction must therefore be made between them.

The improvements which have been made in chemical science have had an influence upon nearly all arts, but especially on that of which we are now writing. The effect, which at one time required a process occupying five or six months, may now be obtained in less than the same number of days. That the reader may be able to appreciate the great advantages of the system now adopted, we must first give an account of that formerly practised.

The first process was to remove the sowens, a paste made of flour and water, used in weaving; which was effected by steeping the goods in lukewarm water, until a gentle fermentation was produced. The piece was then well washed in a stream of water. It was afterwards boiled in a solution of potash, being moved about in the liquor the whole time; the boiling being continued so long as any colouring matter seemed to be abstracted. After this operation, the cloth was again exposed to the action of the alkaline ley, but a much stronger solution than that before used. This was called bucking. A large tub was provided, and into this the fabric was placed; upon it the strong solution was poured from a vessel in which a large quantity was kept boiling. After a short time, the ley was let off into an iron vessel, and pumped back into the boiler, from which a fresh supply of the hot liquid was poured. The cloth was then taken out and well washed, after which it was exposed to the atmosphere to be whitened. To remove any earthy matter remaining in the cloth, the operation called souring was employed. This consisted in an

immersion, for about twelve hours, in a diluted solution of sulphuric acid, of about the acidity of lemon-juice. After being thus exposed for about twelve hours, the cloth was thoroughly washed, so as to destroy all perception of acidity when applied to the tongue. Great care was required in this process, for although the diluted acid has no effect on the fabric, yet, if even a portion of the acid remain in the cloth, it may be so concentrated by heat, as to destroy the fabric in that part.

None of these operations admitted of haste, and hence a considerable time was formerly required in bleaching. "The operation, of bucking," says an author, to whom we have referred in former papers, "was repeated for some cloths a great many times, each time requiring, with the subsequent operation of leyng and watering in the bleach field, the period of a week. The first two buckings were with very strong ley, which it was necessary to diminish in strength to prevent injury to the cloth. These operations could be carried on only during the summer months; and during four months in the year, bleaching, by the old system, was entirely suspended, and the capital of the manufacturers, or proprietors of the goods, locked up and useless; the immense time which the goods were under operation was also the means of a great consumption of capital. Cotton goods, which required from four to six applications of alkaline ley, consumed as many weeks in bleaching; while linens, which could not be bleached in less than from twelve to twenty applications, could scarcely be brought into a marketable state in less than six months."

To understand the true process of bleaching, we must first inquire into the nature of the colouring matter; but upon this subject our information is unfortunately very limited. From the experiments made upon linen by Mr. Kirwan, it appears that in this substance the colouring matter is a species of resinous extract. No experiments having been made on hemp and cotton, we must at present satisfy, or rather limit, our curiosity, by receiving the supposition admitted by others, that in them the colouring matter is of the same kind.

We now come to an explanation of the system of bleaching adopted at present, and shall endeavour to trace the history of its introduction and progres-

sive improvement. In the year 1774, Scheele, a celebrated chemist, discovered the gas, then called oxymuriatic acid, and now chlorine. In experiments afterwards made with it, he discovered its peculiar property of discharging the colour of vegetable substances. These discoveries were communicated by Scheele to our countryman, Kirwan, who suggested its use in bleaching to Mr. C. Taylor, a gentleman engaged in a calico manufactory near Manchester. The value of the agent was instantly perceived, and, in the spring of 1788, the application had been made so successfully, that a piece of calico, brought from the loom, was bleached white, printed in permanent colours, and produced for sale in the Manchester market, in less than forty-eight hours! Some writers have stated, that the bleaching property of chlorine was first discovered by Berthollet, but upon what evidence we cannot say. This chemist certainly made many experiments with the view of applying it to the art of bleaching, and greatly contributed to the progress of the art. The results of his experiments were published in 1789, and in many parts of Europe excited a deep interest in the subject. The bleaching liquor of M. Berthollet consisted of water impregnated with chlorine. But although apparently a simple compound, its preparation was attended with much trouble, and the use of it was very inconvenient. The volatility of the acid is so great, that vapour was given off at ordinary temperatures, which not only destroyed the power of the liquor, but also so affected the workmen with its suffocating properties, that it was almost impossible to use it. In addition to this, it considerably weakened the colours obtained by dyeing, so that it, in fact, could only be used in bleaching white goods. It is evident, therefore, that although Berthollet did much in bringing chlorine into use as a bleaching substance, in a practical point of view his efforts were of little service. At Javelle, in France, some manufacturers, feeling the inconveniences to which we have alluded, added a solution of caustic potash to the liquor, which prevented, in a great measure, the vaporisation to which we have alluded, but also increased the cost of the process.

Neither Scheele nor Berthollet were acquainted with the reason why chlorine

destroyed the colour of vegetable substances. Scheele, following out the singular theory which has made his name so notorious, supposed the gas to unite with the phlogiston of the body. Berthollet, from a false notion of the nature of the gas, which notion caused it to be called oxymuriatic gas, supposed the effect to be produced by the supply of oxygen; but chemists are now well aware that it contains neither oxygen nor muriatic acid.

The difficulty first experienced in applying chlorine in the process of bleaching was soon removed, and in no small degree by the celebrated Watt, of Glasgow, and Messrs. Henry and Cooper, at Manchester. In addition to the disadvantages already spoken of, the receiving vessels, and the method of immersion, were altogether unsuited to the purpose required. A writer in the *Memoirs of the Philosophical Society of Manchester*, for the year 1798, particularly refers to these. Large cisterns, he says, were constructed, in which pieces of stuff were placed in strata, and the liquor being poured on them, the cisterns were closed with lids. This method was soon found to be defective, for many of the pieces were only partially bleached, being white in some parts, and more or less coloured in others.

The term oxymuriatic acid was applied, by the French chemists, to the gas of which we have been speaking, under the supposition that it was a compound of muriatic acid and oxygen. Sir Humphrey Davy having failed in all his efforts to decompose it by the application of every known means of disuniting simple substances, declared it to be an elementary body, and called it chlorine, a term expressive of its peculiar colour.

There are several methods of obtaining chlorine. Mix three parts of common salt with one of black oxide of manganese, and introducing them into a glass retort, add two parts of sulphuric acid. Gas will be immediately given off, and may be collected over the pneumatic trough; to hasten the process, a gentle heat may be applied. A mixture of muriatic acid and manganese is found to be a more convenient method of producing the gas, as the previous compound is liable to boil over into the neck of the retort.

Chlorine is of a greenish yellow colour, and is at once detected by its

strong and disagreeable odour and taste. When received into the lungs, even diluted with atmospheric air, it produces a sense of strangulation, and a constriction of the thorax. If respired in a pure state, it excites coughing, and would, in a short time, destroy life. When in a perfectly dry state, it has no effect on dry vegetable colours, but with the aid of moisture it bleaches them.

An old writer, on the art of bleaching, gives the following description of the apparatus used in his day. "M. Berthollet's apparatus is too complex for the use of a manufactory. Mr. Watt's is better; but a range of four, five, or six hogsheads, or rum puncheons, connected with one another, in the manner of Woulfe's distilling apparatus, is preferable to either of them. Agetators, on M. Berthollet's principle, may be applied. The retort or matrass should be of lead, standing in a water bath; its neck should be of sufficient length to condense the common muriatic acid, which always comes over; and it should form an inclination towards the body of the retort, so that the condensed acid may return into it. I beg leave to observe here, that I always found the liquor to be strongest when the distillation was carried on very slowly. I have also found that the strength of the liquor is much increased by diluting the vitriolic acid more than is usually done. The following proportions afford the strongest liquor: three parts of manganese, eight parts of common salt, six parts of the oil of vitriol, and twelve parts of water."

In the year 1798, Mr. Tennant, of Glasgow, made some very important improvements in the preparation of the chloride of lime, which secured him the patent. A bleaching liquor was thus produced more efficacious than the chloride of potash, and much cheaper. He afterwards succeeded in obtaining it in a solid state, so as to secure its transit to any distance, without injury from keeping. The patent of this ingenious chemist was, however, set aside by the decision of a legal court. The method he adopted of uniting the chlorine and lime was very simple. Into a vessel containing lime water the chlorine was admitted, and a solution of chloride of lime was formed; the redundant lime subsiding, and leaving a clear liquor, in every way suitable for the purpose of bleaching.

The method of bleaching, now em-

ployed, differs from that formerly adopted, chiefly in the substitution of immersion in chlorine, instead of exposure to the atmospheric air on a bleaching ground. The processes, as far as the first bucking, are the same now as before; but when this operation is completed, the cloth is immersed, for about half an hour, in a diluted solution of chloride of lime. It is then taken out, and boiled in an alkaline ley, after which it is again steeped in the bleaching liquid.

These operations are continued until the requisite whiteness is obtained. The scouring is then performed, after which the cloth is immersed in a weak ley of pearl-ash or soap, to destroy the slight yellowish tinge, always left by the chlorine. Linens are frequently passed three or four times through the acidulous water; but cotton goods seldom, if ever, require more than one immersion.

Mr. Kirwan, when making his experiments on the colouring matter of flax, discovered that it was soluble in the hydrosulphurets, as well as in the pure caustic alkalis. This probably suggested to Dr. Higgins the use of the hydrosulphuret of lime instead of potash,—“an alteration,” said an eminent chemist of the present day, “which, if finally confirmed by experience, will be of the most serious advantage to the country, by saving an enormous expense in an article for the whole of which we are dependent upon foreigners.” Dr. Ure states, that the use of this substance was found to injure the fabric; but although it was extensively employed by linen bleachers in Ireland, we are not sure that if injury resulted to the fabric, it may not be traced to the injudicious employment of the article. Indeed, we feel convinced that this is the case.

In bleaching animal fibres, such as wool and silk, the process already explained cannot be adopted, for the strong alkaline leys would dissolve them; and the oxymuriatic acid would, if this were not the case, weaken the texture, and give it a yellow colour.

The colour of woollen goods, when first manufactured, is to be traced to either the greasy substances applied in the process of manufacture, or to their natural oil. These are removed by washing in fuller's earth and soap. The colour of raw silk is produced by a yellow varnish with which it is covered. This may be, in part, removed by long boiling in water; but the most effectual

method is by boiling in linen bags in a solution of the purest white soap, and afterwards washing it in pure water.

H.

SUB-MARINE MINES.

It is a most remarkable fact, that not only in hills and valleys, and from the plains, have the enterprising explorations of the tanners been conducted; but some of the Cornish mines have actually been carried to a considerable distance under the sea. Some of these sub-marine excavations display, in a striking manner, the effects of perseverance, and the defiance of danger, on the part of the miners: for instance, the noted mine of Thel-Cok, in the parish of St. Just, which descends eighty fathoms, and extends itself forward under the bed of the sea, beyond low water mark. In some places, the miners have only three fathoms of rock between them and the sea; so that they hear very distinctly the movement and the noise of the waves. This noise is sometimes terrible, being of an extraordinary loudness, as the Atlantic Ocean is here many hundred leagues in breadth. In the mine, the rolling of the stones and rocks overhead, which the sea moves along its bed, is plainly heard; the noise of which, mixed with the roaring of waves, sounds like reiterated claps of thunder, and causes both admiration and terror to those who have the curiosity to go down. In one place, where the vein was very rich, they searched it with imprudence, and left but four feet of rock between the excavation and the bed of the sea. At high water, the howling of the waves is heard in this place in so dreadful a manner, that even the miners who work near it have often taken to flight, supposing that the sea was going to break through the weak roof, and penetrate into the mine.

A very singular circumstance at Thel-Cok is, that in some places under the bed of the sea, where there is only a small thickness of rock between the mine and the water, in one place not more than four feet, but a very small quantity of water enters the mine by leakage. When the miners perceive any chinks, which might give it a passage, they stop them up with clay, or with oakum. The same method is used in the lead mines of Pavn Labaton, which also run under the bed of the sea. The mine of Thel-Cok has now been abandoned many years, on account of

the danger, which continually became more menacing.

But the most singular work of this kind was executed more than a century ago, in the midst of the sea, near the port of Penzance. At low water, in this place, a gravelly bottom was left bare, in which was discovered a multitude of small veins of tin ore, which crossed each other in every direction. The adjacent rock also contains this mineral in considerable quantities: the miners worked this rock whenever the sea, the time, and the season would permit, until the depth became too great.

The place where this sub-marine tin ore was found, was about two hundred yards from the shore; and as the bank of the sea in this place is very steep and high, this distance is considerable, even at low water; and at high water is covered by the sea six yards deep. As the bottom is gravelly and full of rocks, the waves become much agitated, and rise to a great height, when the wind blows from particular points. This inconvenience takes place throughout the winter, and for a long time caused the failure of the different attempts which had been made before to drain the mine, and raise the ore. At low water mark the rock rises a little above the surface of the sea; nevertheless, there are not ten months in the year in which it is uncovered.

Against all these difficulties, a single individual, whose property was not worth three crowns, and who undertook the work anew, had to contend. This courageous miner employed three summers in sinking a pit, during which time he could only work two hours a day; and every time he went to work, he found his excavation full of water. This he was obliged to empty out before he could recommence his working, which occasioned still greater difficulties when he set about blasting the rock.

At first he had only need of strength and patience; but when he sank to a greater depth, he added to them ingenuity. He built round the mouth of the pit a turret of wood, impervious to the water, and by this means was able to prolong the time of working in the rock. He further endeavoured to shut out the water entirely from his pit, by raising the turret above the greatest height to which the sea could reach.

But here he had new difficulties to conquer: first, to make this turret impervious to water; and secondly, to

stay it in such a manner, that neither the flux nor reflux of the sea, nor the shock of the waves, could overturn it. The enterprising miner had provided against these difficulties. The rock was, fortunately, of porphyry, not too hard to cut, but still very firm. He shaped the portions he separated from it, and disposed them in a regular manner at the bottom of the turret, and closed and caulked with oakum and fat cement all the interstices between the wood and the stone, so that the whole was united into one mass. The pit, like all those in Cornwall, was lined with planks; all the joints being well caulked and pitched. When his framework was thus constructed, he supported it with iron braces. About the mouth of the pit he raised upon four great piles a platform of planks, to support the windlass, which was worked by four men. This work, as may be imagined, took much time, and met with many mishaps in the execution; but the perseverance and presence of mind of the undertaker conquered all obstacles. When the pit and tower were finished, he then reaped the fruit of his industry, and established a regular work at stock-work, drew from it in a little time a considerable quantity of tin, and put his adventure on a good footing. This singular work was known by the name of Thel-Ferry. The persevering individual who planned and executed it, died at the age of seventy years, in the winter of 1791; the mine having in the preceding summer yielded ore worth 3,000*l.*—*Manufactures of Metal.*

THE WEATHERCOCK.

THE weathercock yonder, on the church steeple, is one of the gayest I ever remember to have seen. It has been fresh gilt lately; and when the sun shines upon it, it glitters so brightly, as it turns backwards and forwards, that I cannot help looking at it. The tail of it is very broad, and the wind, blowing against it, turns it round, so that the head of the weathercock is always looking towards the wind.

There is an arrow, painted blue, on the Tan-house chimney; and a boar's head, painted green, on the tip-top of Squire Holmes's summer arbour, to answer the same purpose of telling which way the wind blows; but they are surrounded by chimneys or trees, and thus much of the

effect of the wind is kept off; neither of them show the changes so well as the weathercock. I was looking at it yesterday for some time, and as the gusty wind whistled round, sometimes loud and shrill, and at other times low, the weathercock moved continually one way or the other. At one moment it swept half round; then it turned very gently on one side; and every now and then the blustering wind gave it such a swing, that it looked just as if it was alive.

"Well," said I, "I should not much like to be where that weathercock is; those who will carry their heads high, must expect to be blown about in stormy weather, more than their neighbours; let it be my look-out to walk lowly and humbly through the world, and then, perhaps, I shall escape many a blast that puts some people about sadly."

Now, it is very possible for a person who stands at the bottom of a spire, to learn a lesson from the weathercock at the top of it, and this was the case with me; for while my eyes were directed towards it, I began musing in my mind, how much my conduct, through life, had been like the unsettled, shifting object on which I was then gazing.

One thing that struck me was, that the weathercock had not gilt itself, nor placed itself at the top of the spire, whereas, I had often made myself fine, and carried myself very high, for no other purpose than to gratify my own foolish vanity. Then, again, as to the weathercock turning backwards and forwards with every breath of wind, why it was placed on the spire for that very purpose; it was its duty, as it were, to move about, and never to continue steady while the wind shifted; whereas, I had, a hundred times over, moved backwards and forwards, and shuffled and changed, when it was my duty to have remained steady; so I soon found out, that, however I might undervalue the weathercock as a changeable unsteady thing, it had many advantages over me.

I called to mind the days of my earliest childhood, when I first began to learn my alphabet, and knelt on the lap of my mother to lisp my nightly prayer; why, a feather flying over my head would have been quite enough to draw off my attention; my letters would have been neglected, and my very prayers altogether forgotten. I was a *weathercock* when a child.

It was just the same with me when I

went to school; I ought to have steadily attended to the lessons of instruction that were given me; but did I do so? No. A game at "hot beans ready buttered;" a scramble among my companions for some nuts; or a slide on the frozen-pond, would have drawn me from all the books that could have been set before me. The silliest nonsense that my school-fellows could engage in, was enough to turn me aside from my learning. I was as much a *weathercock* when a school-boy, as when I was a child.

"Harry," said my father, when I was put apprentice, "let your master find you trustworthy; let him know that you are not only his servant, but the servant of the Lord. Be diligent in business, and fervent in spirit, Harry." "I will, father," was my reply; but oh what a *weathercock*, in a little time, I found myself to be! Many an idle hour, many an unimproved sabbath, can I look back upon with sorrow.

And how has it been with me since I was an apprentice? In truth, I am ashamed to think how little steadiness I have shown. I have been quick enough to see, and fixed enough in my determination to obtain the good things of this world, but what are they when compared with the glory of the next? What will they do for me in sorrow and in sickness; and especially when I come to die?

My parents feared God, and taught me to fear him too. They put the Holy Scriptures in my hand, "which are able to make us wise unto salvation, through faith which is in Christ Jesus." I ought, therefore, to have been steady to my principles, and to have set my brow as brass, and my face as flint, against every temptation that led me from the Lord of life and glory: instead of this, again and again, have I gone with the stream, and been blown along by the breath of those who had not God in all their thoughts. In childhood, in youth, and in manhood, I have been no better than a *weathercock*.

But why, think you, do I tell you all this? Why, that you may profit by my errors. There is no reason, that because I have been a *weathercock*, you should be one too. We "live and learn," and it would be a very odd thing if, with the experience of the years that have passed over my head, I was not a little wiser than you are.

I do not know whether you will take

my advice or not, but I do know that it is intended to do you good. If you would willingly add to your knowledge, your possessions, your respectability, or your happiness, you must be steady. Turn from sin and folly, and steadily persevere in every duty; not swinging backwards and forwards, with the changing opinions of foolish men, but being guided continually by the unchanging word of God.

Be not a *weathercock* in the things of this world, but especially be not a *weathercock* in the things that relate to the world to come. It is a fearful thing to waver and shift about from the hope of salvation that is in Jesus Christ. Fix your foot on the Rock of Ages, your eye on the cross of Christ, your faith on the merits and sacrifice of the Redeemer, and then, let the wind blow from what quarter it will, whether it be a breeze, a blast, or a hurricane, you will be secure. Others may waver, and be as a billow of the sea, or as a ship that has no anchor, tossed to and fro, and carried about with every wind, but you will be immovable, as the everlasting hills; sustained by the almighty power of God, with whom is no variableness nor shadow of turning, whose promises are all yea and amen in Christ Jesus, and who is "the same yesterday, to-day, and for ever."

Perhaps you did not expect me to make so serious a subject of the bright shining *weathercock*, that looks so cheerful at the top of the spire; but if for a moment you will withdraw your eyes from the gilt and gaudy vane, and fix them on the green hillocks and gray stones in the churchyard, you will no longer wonder that I should be serious. We may waver and shift and turn about as much as we will, but we cannot turn from death, "Dust thou art, and unto dust shalt thou return." Nor from the judgment, "He hath appointed a day in the which he will judge the world in righteousness." And therefore, seeing that all, both young and old, shall "stand before the judgment seat of Christ," it becomes us to warn one another in love, not to turn aside from our Christian course, but to follow after the things that belong to our peace.

Think on the words that I have spoken: let the *weathercocks* of the world turn which way they will, but let your eye, your heart, and your hope be turned towards heaven.

HEAVENLY BLISS.

FIRST, The Scriptures represent the presence and enjoyment of God as constituting one of the sources of heavenly bliss. "As for me," said David, "I shall behold thy face in righteousness;" and he speaks of this as not only essential to perfect enjoyment, but as conferring it. At the time when he uttered these words, David had much in possession, and more in prospect. He was the son-in-law of the reigning monarch, and he had the promise of the God of truth that, at the decease of Saul, he should ascend the throne himself. But worldly possessions and worldly glory could not fill his capacious mind. Nothing less than the presence, and favour, and enjoyment of the God who made him, could do this; and therefore, in all the sacred glow of confidence and anticipation, he exclaimed, "I shall be satisfied when I awake with thy likeness." "Blessed," said our Lord, "are the pure in heart, for they shall see God;" he admitted to a beatific view of his perfections, and enjoy him as the portion of their souls. But this assurance is only cheering to those who love God. To all unregenerate men God is regarded as an enemy; and, what is more, an omnipotent enemy; he can destroy both body and soul in hell. The prospect of seeing God is no solace to them. They will, on the contrary, employ all the energies of their minds, will bury themselves in business, and plunge into dissipation, and run into the most fearful and shameful excesses, to banish all thoughts of God from their minds. Rather than encounter their Maker, they would flee to the very ends of the earth! How, then, could the presence of God be a source of joy to such an individual in heaven?

Secondly, The Scriptures represent the presence of the Redeemer in his glorified state as constituting another source of heavenly bliss. "If I go away," said he to his disciples, with inexpressible tenderness, "I will come again, and receive you to myself, that where I am there ye may be also." And to be with Christ, to see him as he is, and to be made like to him, must appear, to the holy taste of every converted man, the very summit of bliss. Hence the apostle Paul, in the vigour of life, and in the midst of a splendid career of usefulness, declared that he had "a desire to depart and to be with Christ." Where is the

renewed mind which does not feel that to see Him who was once a man of sorrows and acquainted with grief, exalted far above all principalities, and powers—to behold the despised and rejected of men surrounded by a bright and countless host of adoring spirits, and to recognise in this exalted One a brother and a friend, must prove the source of ineffable and eternal delight? But he is not a brother and a friend to such as have not been born again. By them he will be found an inexorable Judge; and there is no wrath so dreadful as the wrath of the Lamb! What possible pleasure could the presence of Christ in heaven afford to unconverted men? How could they bear to look upon Him whose authority they have contemned, whose laws they have broken, whose grace they have slighted, whose ordinances they have treated with contempt? In what language but the following could they expect him to address them: "Because I called, and ye refused; I stretched out my hand, and ye did not regard; but ye have set at nought my counsels, and would none of my reproofs, I also will laugh at your calamity, I will mock now that your fear is come?" It is absolutely necessary to be born again to derive enjoyment from the presence of Christ in heaven. We must be made to love his character, and person, and work; and then, to be with him, to behold his glory—the glory which he had with his Father before the world was—will prove the spring of perennial and infinite enjoyment.

Thirdly, The Scriptures represent the society of angels, and of glorified spirits, as constituting another source of the happiness of heaven. Without regeneration this would, however, yield us no joy; because that society is holy society. "Ye are come," said the apostle to the believing Hebrews, "to the innumerable company of angels, to the general assembly and church of the first-born whose names are written in heaven, and to the spirits of just men made perfect." What is there in such society as this—the society of angels who kept their first estate, of the redeemed from among men, completely transformed into the image of God, to afford enjoyment to an unsanctified mind? "Two cannot walk together," we are taught, "unless they be agreed." Where the tastes, and pursuits, and habits of persons are dissimilar, especially where they are utterly discordant, instead of finding pleasure in

mutual intercourse, it is manifest that each must feel the company of the other to be an intolerable nuisance. Confine an illiterate peasant with a company of philosophers, or a philosopher with persons unacquainted even with the elements of knowledge, and who glory in their ignorance; and, it were easy to predict that each would most earnestly long for the hour of emancipation.

From these general principles we draw the conclusion, that the holy society of heaven would yield no happiness to an unconverted man. But why should we resort to a process of reasoning on this point, when fact, whose verdict is more unequivocal than reason, proclaims, in a manner not to be mistaken, that the company of holy angels, and of holy men, would not prove a source of enjoyment to a person who had not been renewed in the spirit of his mind? Do such men, in this world, desire the company of the people of God? Do they delight to meet and unite with them in conversation, which has for its topic the solemn and all-important concerns of eternity? So far is this from being the case, that, if the conscience of such men were to give its testimony, it would confess that scarcely was any other thing felt to be so wearisome and disgusting. And how should it be otherwise in heaven? Imagine, for a moment, an individual, whose heart is enmity against God—and such is the character of every unrenewed heart—an individual who hates every spiritual object, and exercise, and duty, and enjoyment; and such is the state of moral feeling of every unrenewed man; imagine such an individual introduced into the company of “the just made perfect,” listening to them for a time, while they discourse together on the great mystery of redeeming love, and then, inspired by the sacred theme, strike all at once their golden harps, and pour forth a noble anthem of praise “to Him who was slain, and had redeemed them by his blood out of every kindred, and tongue, and people, and nation;”—imagine him seeing and hearing all this, would he possess a single feeling in common with them? Would the sacred inspiration of gratitude and devotion fill his soul? And, totally devoid of congeniality with the heavenly worshippers, could he derive any pleasure from their society? It is impossible, in the very nature of the case, that the holy enjoyments of heaven should yield any delight

to an unholy mind. “Except a man be born again, he cannot see the kingdom of God.” Fact and experience declare this; the constitution of the mind, the nature of heavenly glory, the Scriptures, both of the Old and the New Testament, the law and the prophets, the gospels and the epistles, the apostles and the evangelists, all unitedly declare, to every member of the human family to whom their voice reaches—“Ye must,” yes, “*must* be born again.”—*Dr. Payne.*

SWARMS OF LOCUSTS.

LARGE swarms of locusts are often seen in Madagascar in the spring and summer; they generally approach the central parts of the island from the southern and western quarter, and pass, like a desolating scourge, over the face of the country, leaving the trees and shrubs entirely leafless, and destroying the plantations of rice and manioc, and whatever the gardens contain. Their appearance on approaching is like a dense cloud of considerable extent, the lowest part of which is about two feet above the ground, while the highest part rises to a great elevation. The natives, on the approach of the locusts, fly to their gardens, and, by shouts and noises of the most tumultuous kind, endeavour to prevent their alighting. In the uncultivated parts of the country, they often dig holes of large dimensions, and nearly a foot deep, in which great quantities are collected and taken; or, they arrest them in their flight by means of wide shallow baskets, or by striking them down with their lambas, after which they are gathered up in baskets by the women and children. The locusts form at times an important article of food; for this purpose they are caught as above described, slightly cooked, and eaten, after the legs and wings have been picked off; or they are partially boiled in large iron or earthen vessels, dried in the sun, and repeatedly winnowed, in order to clear the bodies of the legs and wings; they are afterwards packed up in baskets, and carried to market for sale, or kept in large sacks or baskets in the house for domestic use.—*Ellis's Madagascar.*

MANNER IS WORTHY ATTENTION.

OUR very *manner* is a thing of importance. A kind *no* is often more agreeable than a rough *yes*.—*Bengel.*



STAFFA.

STAFFA, one of the Hebrides, or Western islands of Scotland, lying a few miles to the west of Mull, is scarcely a mile in length from north to south, and about half a mile at its greatest breadth from east to west. Attention to it appears to have been directed by a singular circumstance. The late Sir Joseph Banks, when on a voyage to Iceland, was led to put in at a port in Mull, where he and a friend were very hospitably entertained by Mr. Maclean, the chief proprietor of the island. Here they met with an Irish gentleman, who told them that during a fishing excursion the day before, he had fallen in with what he considered one of the greatest wonders of the world, though none of his Highland acquaintances seemed to have noticed it.

This account so greatly excited the curiosity of the travellers, that it was resolved forthwith to proceed to the island, which they found to be a stupendous example of basaltic architecture. At that time, the Giant's Causeway in Ireland was the principal specimen of this remarkable structure generally known; but others have since been discovered in various countries. As lava always accompanies such formations, it has been supposed that they were thrown up from the earth by the action of intense fire; but how the fused stone should, in the process of cooling, be crystallized into the regular shapes which it now exhibits, is not easily explained.

SEPTEMBER, 1839.

In such instances, there appear clusters of angular columns, each one having from three or four to six or seven sides or faces, and often as regularly cut as they could be by human hands. Sometimes these pillars are in fragments, lying scattered and confused, like a heap of ruins; at others, though the several blocks which compose each shaft still adhere firmly together, the whole inclines so much as to resemble an edifice half fallen down; but in some rare specimens, there is a magnificent pile in which there is all the regularity of art combined with a grandeur it has never attained.

The island of Staffa, the name of which is a Norse term meaning staffs or pillars, is a mass of lava and basalt. Its columns are generally hidden beneath a thin layer of soil; but in many places, they are to be found shooting out through this covering, and in digging a few feet down, the stone is every where apparent. The rock stands bare to view round nearly the whole circumference of the island. Its grassy top seems to be supported nearly all round on a range of pillars, in some places, indeed, so low as to be almost on a level with the surface of the water, but for the greater portion raised above it, and in some parts elevated to the height of a hundred and fifty feet.

The highest part of the line of pillars is at the southern end of the island; and here is the celebrated natural excavation, called Fingal's cave. It is forty-two feet in width at the mouth, extending two

hundred and thirty-seven feet in depth, and gradually diminishing from nearly a hundred to about fifty feet in height, supported throughout on both sides by perpendicular columns of extraordinary regularity. The opening is surmounted by a noble arch; and from this to the farther end of the cave, the roof extends in an unbroken surface, composed in some parts of smooth and unvariegated rock; in others of the ends of pillars stuck together in groups or bunches; and with the substance that fills up the interstices, displaying a species of mosaic work of great regularity and beauty. On the west side, the wall of pillars is thirty-six feet high; but on the east, though the roof is of the same elevation, they rise from a much higher base, and are only eighteen feet in length. Along this side is a narrow foot-path, raised above the water, which covers the floor, along which an expert but daring climber might reach the farther end of the cave. The usual mode is to enter it in a boat; but this can be done with safety only when the weather is tolerably calm. As the opening is spacious, there is abundant light to the extremity; and when there is a heavy sea, the waves roll into it with great force.

Sir Joseph Banks beheld Staffa with great enthusiasm. "Compared to this," he said, "what are the cathedrals or the palaces built by man? Mere models or playthings, imitations as diminutive as the works of man will always be when compared with those of nature. Where is now the boast of the architect—regularity, the only part in which he fancied himself to exceed his mistress? Nature is here found in her possession, and here it has been left undescribed for ages. Is not this the school where the art was originally studied! And what has been added to this by the whole Grecian school? A capital to ornament the column of nature, of which they could execute a model only, and for that very capital they were obliged to a bush of acanthus. How amply does nature repay those who study her wonderful works!"

Others have shared these elevated feelings. "My dear boy," said the Rev. Legh Richmond, "I have seen Staffa, and write this from Iona. What I shall say, I know not; for really I can say nothing as I ought. When I entered the cave of Fingal, I knew not whether to burst out into one unceasing cry of astonishment, or meditate in unbroken silence of over-

whelming wonder, or fall down on my knees in devout adoration of Him who formed such a scene of sublime beauty."

In reference to a second visit, he thus wrote:—"No words can describe the whole: we had the afternoon sun upon all the most striking features of this magnificent group. The water was so calm that we went into the great cave in the boat, and thus obtained the finest view possible." He adds, "We sang a hymn; it was sweetly echoed;" and where is the Christian who will not feel that such a tribute to the God of wisdom and power was demanded by so magnificent a spectacle? I.

THE STRUCTURE OF ANIMALS.

I need not describe the nutrient system; but I must notice the manner in which the food enters the circulation, as the distribution of what is required for replacement or repair. Certain glands, which anatomy will describe, and I need not, unite their chemical product to that which the chemical solvent in the stomach has extracted from the food; and the final result is a fluid resembling milk. There is but little information in this knowledge; but physiology can say no more, though it would say that in many more and other words: it is a department of chemistry not yet understood.

To convey this fluid to its destination, there is contrived a very intricate, and but imperfectly understood structure, the lacteal system of vessels; which is, however, but a portion of that absorbent system which pervades the whole body. Being scarcely known to those who are sufficiently acquainted with the mechanism of the veins and arteries, it is proper here to say, that a single vessel of this nature is a slender tube, provided with numerous valves, similar to those of the veins, so as to prevent the fluids from returning; but that the orifice where the action commences has never been seen, and the manner in which it propels its contents may be conjectured, but is not known. The duty of the orifice is analogous to that of the roots of a plant; while as the offices of this system are to return also into the circulation every effused fluid, certain portions of secreted ones, and also, as is believed, every part which is expended and demands replacement, those orifices should exist in every point of the body. This is very

difficult to comprehend ; but it is not the only difficulty of a similar nature in the ultimate parts of the animal structure. As soon as the small branches can be seen, they may be traced uniting into larger ones, occasionally passing through glands, of which the uses are unknown, until the whole terminate in one large trunk, the thoracic duct, conveying its contents into a vein, the subclavian, and thus to the heart and the circulation.

Such is a sketch of the whole process of nutrition, chemical and mechanical ; and the volumes which it has occupied can teach no more, though popular readers may be surprised at such a statement. I have described it indeed as it occurs in the larger animals : but we must believe it to be universal, because the digestive organs are so, and because no other mode of supplying the body is conceivable.

It is in the circulating system that the visible differences in the vascular mechanisms of different animals begin : but I shall here confine myself to that which is common to the superior races ; classed by natural history in a manner which I need not at present specify, and generally termed perfect ; with no great propriety, since every thing is perfect which fulfils its ends ; and since, if simplicity constitutes perfection, as philosophers maintain, a medusa is a more perfect animal than a man.

Every one knows the general existence, forms, and arrangement of the heart, arteries, veins, and lungs, or gills ; and these unite to form the circulating system. In this, the heart is the basis : while the arteries, in the first division, or circle, of the two which constitute the whole, spring from it by one trunk, proceeding, under continued ramification, to all parts of the structure, till we can trace them no longer. And as we must believe that the ultimate ones are every where, from the nature of their offices, this is a repetition of the difficulty already pointed out in the absorbent system. But whatever these unknown ultimate branches may be, there are assignable ones, through which the arterial vessels are connected with a similar and parallel system of veins, gradually uniting into one trunk, and ending in the heart. This is a hollow muscular organ, divided into cavities for expulsion and reception, and provided with certain valves, as are the veins, throughout. Thus the blood circulates in a continued

round, of which the heart is the centre and the impelling force ; while, in that course, it receives the nutriment already mentioned, and supplies all the necessary wants of the body, in replacement and in secretion.

The blood itself is a chemical compound, differing materially from the nutriment which it receives ; but what is known of its composition would not enlighten the general reader respecting the offices which it performs, since it has not enlightened physiologists themselves. And this is equally true of every thing which is performed in this great laboratory, the chemistry of which is not understood. It is not known how replacement and secretion are produced ; and except that we trace a certain chemical procedure in the lungs, yet not even then understanding how it acts, or how it is effected, we do not know how the nutriment is converted into blood ; while we must confess that the entire chemical system, from the food to the blood, is as operose, and involved, and circuitous, as it is unintelligible. They who have read volumes on these subjects may perhaps think that I here speak unadvisedly ; but in all the sciences there are many volumes that teach little, as there is a conventional language which passes for knowledge, encumbering, not enlightening him who desires to understand, and knows in what knowledge consists. A subject clearly understood can be made clear to every one, as it does not always require technical phraseology to do this ; but I am willing that the physiologist explain, in any manner that he may choose, what I abandon.

I have described one circle in this system, but there is a second. The heart is a double organ, and the secondary circulation is through the lungs in land animals, and through the gills in aquatic ones, under that exception in the whale tribe, which it is sufficient thus to notice. An entire system of arteries and veins pervades these parts, under similar connexions with each other and the heart. Thus the blood which has returned from the body in the first semicircle of the veins, goes forward through a second semicircle in the lungs ; being venous blood throughout it, though the vessels themselves act the part of arteries : returning in the venous semicircle as arterial blood, to be forwarded in the first arterial semicircle to all parts of the body, and again returned by the

associated veins. It is by that action of, or in the lungs, to which I have just alluded, as, similarly, in the gills, that the venous blood becomes arterial: while all that we truly know of the cause is, that atmospheric air must be inhaled, or in the latter case, water containing it, and that carbonic acid is exhaled. Whenever it shall be proved that the azote in the air is useless in this process, the favourite oxygen may be substituted for the word air; but not till then.

If the nutrient system is a chemical laboratory, far more is the circulating one; but there is a system of appendages attached to it which must first be noticed. Those are the glands: it is the glandular system. Many purposes besides repair are needed in the animal body. Omitting those required for the nutrient system, since their specific uses are not understood, there are noxious or superfluous things to be excluded, cavities to be moistened for the purpose of diminishing friction, hinges to lubricate, air-passages to be protected, the skin to be preserved in a soft state, the eyes in a transparent one, and much more; as in particular cases, poison, wax, silk, musk, and so forth, are to be formed for special purposes. And all these things are produced from the blood, by the intervention of the organs in question; of which all that we know is, that they consist of small vessels, continued from the arterial system, and thus accumulated; while, though the blood appears to return in the usual manner through veins, the peculiar substance required appears, as if in the interval, and is found in another vessel, or vessels, the ducts of the gland. Of other bodies, somewhat resembling glands, and termed such, very improperly, when they have no ducts, and secrete no fluid, we know nothing but that they exist: such is our knowledge, even now, of the animal structure. Of the mode in which glands act, or what is their intimate arrangement, we know very little. The vascular mechanism we approximate to, in some cases, and we presume on it in the rest. Of the blood, we know that it is a compound containing all the elements which recombine to form the new products: whence we know that the processes are chemical, and that every gland is a laboratory, or a chemical engine, as the separate ones have different chemical powers, and, generally, definite as different: always so, except under disease. The modes of

operation have been conjectured; but as conjectures are not knowledge, I need not here state these speculations.

The last portion of the animal structure is the nervous system; as it is that without which the whole would be a dead mass. Be it as imperfect as it may, in any animal, it is still the beginning, and the end: the seat of life, the source of motion, the chemist; the sentient, the enjoying, the portion for which all else exists. Where there is intellect, that is its place; it is the seat of reason, as it is the ultimate organ of all perception, and it is equally the seat of what is termed instinct. It is the source of voluntary motion through the will, as it is of unconscious and unwilling motions. It is equally the seat of the affections, and of the moral feelings, where those exist: it is the seat of mind. Ceasing to act, as it does from various noxious causes, and as it does from defect of nutrition, since, like all else, it demands a supply of food for the renovation of its mechanism or its energies, mind disappears, the chemistry of the machine stops, the ordinary extra-organic chemical actions take place, and the sequel of death is decomposition. In the current language, the body is returned to its native dust; but in philosophy, it is returned to the great circulating laboratory which carries on the unending process under which life is for ever renewed through death, under which destruction becomes the source of new organization.—*Macculloch.*

FRUITS.

FRUIT trees, yielding fruit for the food of man, were created on the third day of the creation; and it would appear that when the whole animal kingdom was swept away by the flood, except so many as were with Noah in the ark, the fruit trees on the earth were not destroyed; for we find it recorded, that after the deluge, "Noah began to be a husbandman, and he planted a vineyard," Gen. ix. 20.

The vine (*Vitis vinifera*) is thus the fruit tree which is the earliest mentioned by name in the sacred volume, and it continues till the present time to be the most important fruit cultivated. Ripe grapes are amongst the most palatable, wholesome, and nutritive of all other fruits; the acid, the sugar, the mucilage, and the bitter and astringent principles in the pips, being all so nicely

blended in due proportion, that grapes rarely disagree with the most delicate stomachs. Of this there is one remarkable proof worth mentioning, namely, that consumptive patients, when reduced by that most insidious disease to mere skeletons, when ordered, at the season of the vintage, to live exclusively on ripe grapes, frequently regain their former plumpness in a few weeks, and many recover entirely. At Rudesheim, on the Rhine, which is much resorted to by patients with this view, they are not allowed any food whatever besides the ripe grapes, and a very little bread, a diet which usually, in a few days, renders the appetite keen and healthy; and the grapes, which may be eaten in unlimited quantity, containing so large a portion of nutritive matter, it is not to be wondered at, that the most emaciated soon begin to improve.

The dried grapes, in the form of raisins and currants, (which are a small sort of grape grown in the Levant,) would answer as well for invalids as the fresh ripe grapes, were it not that the proportions of the constituents are altered by the process of drying; the acid, in a great measure, being displaced, while the sugar is so much increased, that no great quantity can be eaten without producing thirst and other unwholesome effects. Whether this want of acid might not be advantageously supplied by means of lemon or lime juice, or the like, would be worth trying.

Like most plants which are extensively cultivated, there are innumerable varieties of the vine, differing in the size, colour, and flavour of the grapes produced, as well as in the mode of growth and vigour, or delicacy of constitution of the plants. Many varieties, accordingly, are so delicate, that they have to be kept in this country entirely protected, under glass, in vineries, while other sorts grow luxuriantly out of doors, when placed against walls with a southern aspect. This is almost indispensable, even with the hardiest sorts here; but in the warmer climates of the vine-growing districts on the continent, the vines grow much in the same way as our gooseberries and red currants in low growing bushes, supported on stakes, the long branches being regularly pruned off to keep the plants within bounds, and to increase their vigour.

In warmer countries, again, such as Sicily, the south of Italy, and Palestine,

they allow the vines to grow to their full height; supporting them on high trellices, or training them on elms and other trees; a mode of management which produces a very pleasing and picturesque effect. Even in colder countries, such as the south of England, and the north of Germany, vines are in this way frequently trained over arbours in gardens in a very delightful manner, though the ripening of the grapes, in that case, cannot always be depended upon.

In climates colder than England, grapes will not ripen at all out of doors, and must be kept entirely under glass when wanted for the table.

An interesting fact has lately been published, in an ingenious little work on the vine, by Mr. Clement Hoare, namely, that the weight of grapes which every vine can properly produce is proportional to the thickness of the stem immediately above the ground; consequently, a young vine, with a thin stem, cannot bear a weight of grapes equal to an old vine with a stem many inches in girth.

Not less delicious, though greatly less important than the vine, is the strawberry, (*Fragaria vesca*) so called from the practice of gardeners laying straw under the plants as they come to maturity, to prevent the ripe berries from being soiled by the garden mould. The ripe strawberry is no less wholesome than the ripe grape; and the great Swedish botanist, Linnæus, is said to have warned off the attacks of gout, by eating freely of this fruit. The writer is not aware whether it has ever been tried to diet consumptive patients on strawberries, as is done with ripe grapes at Rudesheim, though there cannot be a doubt that it would be little less, if not equally successful.

Our strawberry season, in England, is generally over in a few weeks, about midsummer; but in France, they have strawberries in great profusion for several months. The venerable and intelligent Abbé Gossier, of Rouen, told the writer of this, that he always had strawberries at his table from May till October, but the Abbé lived almost exclusively on fruit, and having a large garden, and the means of working it to the best advantage, it was important to his comfort to have an ample supply of fruit as long as possible. The sort cultivated in France, which produces in this successive manner, is small, but well flavoured, and is similar, though not the

same, as those our gardeners call the alpine.

The cultivated sorts of strawberries are very numerous, and become doubly more so by artificial crossings, some being very large, in which case they usually lose flavour, and others small, in which case they gain in flavour.

The chief drawback on the utility of the strawberry is, that it cannot be preserved nor used in cookery, the flavour being so delicate and evanescent, that it is easily lost or destroyed. If the fruit could be dried like raisins or currants, so as to retain the flavour, it would very greatly enhance the value.

The apple tree (*Pyrus malus*) is a native of Britain, being far from uncommon in woods, copses, and hedges, though the wild apples, or crabs, are small, dry, sour, and unpalatable, and would not be much improved by cultivation in the best soil; but by sowing and resowing the seed, and crossing and recrossing the sorts, thence produced, an innumerable variety of sorts has been procured, of which there are several hundreds, perhaps a thousand, which are of excellent quality, and so greatly improved upon the original wilding crab-apple, that it would be difficult to recognize them as of the same species, much less mere varieties of that species. Some ripen early, some ripen late; some are very large, and not so fit for the dessert as for baking, boiling, or making cider; others are small and of delicate flavour, among which the golden pippin is one of the most celebrated. The late distinguished president of the Horticultural Society, T. A. Knight, Esq., inferred from the decay of the golden pippin trees in Gloucestershire, that the successive grafts, though young in appearance when grafted on the stocks, partook of the aged constitution of the original tree, or first golden pippin; and consequently, he predicted that the entire sort would become extinct in spite of every effort to preserve it. Whether this prediction should ever be fulfilled, seems to be as doubtful as the doctrine upon which it is founded. The writer of this paper, at the moment of penning this sentence, can see from his study window a golden pippin tree, of between twenty and thirty years' standing, and as yet showing no symptoms of decay, but bearing well every successive year.

The chemical constituents of the apple show that it is a fruit both wholesome

and nutritive, consisting of a pulp made up of mucilage and vegetable fibre, flavoured with an acid and with sugar, similar to the acid and the sugar in grapes and in gooseberries. The acid is termed, by chemists, the malic acid, and is similar in properties to the acid in lemons and oranges. The sugar differs materially from the cane sugar of commerce, in not being crystallizable. The application of heat, either in the process of baking, roasting, or boiling, tends to break down the interstices of the cells of the apple in which the pulp is contained; to diffuse the acid and the sugar more uniformly through the mass, and therefore to render the whole more easily digested than in the raw state.

The pear tree (*Pyrus domestica*) is a species of the same botanical genus as the apple; a genus in which the quince (*Cydonia*) was once arranged, but it is now separated and placed in another genus, including the pretty little shrub, the Japan quince, (*Cydonia Japonica*), (formerly *Pyrus Japonica*), whose beautiful crimson blossoms may be seen on sheltered walls, very early in spring and during the first part of summer. Like the apple, the pear is found growing wild in our woods and copses, but there it produces fruit of a very inferior description, and very unlike the rich juicy fruit of the garden and the orchard. There are almost as many known varieties of the cultivated pear, as there are of the apple, all produced by repeated crossings. Professor Van Mons, of Louvain, is stated by Dr. Neil, in his Horticultural Tour on the Continent, to have himself produced over three hundred good sorts of pears, different from any cultivated in Britain.

The deficiency of acid in the pear renders it less wholesome for delicate stomachs than the apple; but to those in robust health it is nutritive and excellent, and may be eaten in quantities without inconvenience.

The cherry tree (*Prunus cerasus*) is another of our native trees, very common in woods, and provincially termed the *gean*; the wild fruit being very well flavoured, though there is little pulp on the stone. The cultivated sorts, though considerable in number, are by no means so numerous as those of the apple and pear, and are limited to a dozen or two, of which there are not above five or six much sought after. The finest is the bigareau—a large pale-coloured fruit,

darker on one side, the pulp being rich, separating freely from the stone, and of excellent flavour.

Contrary to the popular opinion, which is unfavourable to stone fruit in general, ripe cherries may be eaten in considerable quantities. On the continent, where fruit is more a regular article of diet than in England, the only addition which is considered indispensable, as a corrective of any crudities that may arise from eating too much fruit, is bread, and children are rarely allowed to indulge in fruit, without eating bread at the same time.

The plum (*Prunus domestica*) is another of our native wild trees, which has been improved by cultivation in a similar manner to the other fruits mentioned above, though like the cherry, the varieties of the cultivated plum are by no means numerous. There may be a doubt, indeed, whether the sloe is not the original stock whence have been derived, not only the several varieties of the plum, but even the peach, nectarine, and apricot, whose delicacy of flavour and richness of pulp are so superior to that of any other stone fruit, as to render all comparison nugatory.

The blossoms of the peach are not dissimilar in colour to those of the almond tree, (*Amygdalus*), which are so beautiful in our early spring, though our climate is, in most instances, too cold to bring the fruit to perfection, and we have to depend for our supply of it on Barbary and Palestine. The banks of the Jordan are the most celebrated for producing almonds, and several striking allusions are made to the almond in the sacred volume, as in the passage, "Although the fig tree shall not blossom, neither shall fruit be in the vines; the labour of the olive shall fail—yet will I rejoice in the Lord," Hab. iii. 17.—J. R.

MEANS AND USES OF KNOWLEDGE.

No. II.

Addressed to Young Men.

A correct knowledge of his native language, and an ability to express his thoughts with propriety and in a good style of composition, is within the reach of every young man, and should by all means be secured. By keeping a journal, letter-writing, taking notes from memory of lectures and discourses, accompanied with your own thoughts; reading

good English authors, and occasional composition, you will insensibly acquire an accuracy and facility of writing, which will be to you of incalculable value.

History is also a very useful branch of knowledge, and should be systematically pursued. Take the best written histories of the most important periods, one at a time, in their natural order, and read them attentively; taking down notes and making references, that you may retain the knowledge acquired, and have it at your command when you wish to use it.

But suppose you have learned all these, at least as perfectly as most do; are you here to stop? You have but just begun to experience something of the pleasure of mental elevation, and to taste the sweets of knowledge. Go on; the field will grow wider and richer as you advance.

Fix your attention on some one of the most important subjects of study, and determine to master it. It is not of so much consequence which, as you may perhaps suppose; for the mental discipline to be gained, is the principal object; and when once secured, it may be applied to all other subjects as well as to that. As Cicero has said, there is such connexion between all the great departments of human knowledge, that a thorough understanding of any one, is a preparation better to understand all the rest. The more laborious and difficult the subject, the better, provided you can master it; for it is in all other departments of learning as it is in music; to master one really difficult piece, makes all others come easy, and imparts more valuable discipline than a thousand lessons that call for no effort.

Suppose you take up some language, ancient or modern, such as may seem to promise you most advantage. One hour of close study every day, with the occasional help of a teacher, may give you in one year so much knowledge of that language, as to enable you to read, write, and speak it; as greatly to enlarge and correct your knowledge of our own language; as to render the acquisition of its kindred languages four times easier than before; and as greatly to facilitate your progress in any other study you may wish to pursue. It will be worth far more to you than all the gold, or all the gratifications of indolence and pleasure, which it may cost you. It will probably recompense you even more gold than it

cost, and it will certainly reward you with a thousand times more pleasure.

Or suppose you take up some subject of natural science; natural history, or natural philosophy, or astronomy, or anatomy, or chemistry, or mineralogy, or geology, or botany. On each of these sciences you may hear courses of lectures, and by attentively studying them, one at a time, in connexion with hearing lectures, you may be gradually introducing your mind to the great lessons of nature, and thus acquiring a knowledge of the works and ways of God.

Or suppose you take up intellectual and moral philosophy; or civil polity; or political economy. Study the best authors upon each, taking notes and references; converse with the most intelligent men respecting it; write down your own thoughts and reflections; and finally set yourself to compose on the subject. You will thus begin to have definitely formed opinions upon the subject, and to feel your own strength.

But here you are perhaps ready to say, The task proposed is too difficult and arduous. It may be accomplished by some superior intellects, or by men exclusively devoted to learning; but it is not for me to climb those enviable heights. There is not so much difference in the native capacities of different intellects as you probably suppose, and knowledge is more accessible to all minds than is commonly imagined. When its generic principles are well mastered, the rest becomes easier; memory is much relieved, and the pleasure increases as you advance. The reason of this is, that unity pervades all the works and ways of God.

For instance, suppose you are studying geography. Instead of having to gather up and hold in your memory all the individual facts without order, which would be a disagreeable, hopeless, endless task, you first learn the general facts or principles which comprehend them. You divide the globe into zones or belts, and ascertain what are the natural productions of the several belts of latitude. You then learn the relative position, size, and general features of each country. You ascertain the influence of climate, scenery, and other physical causes upon the natural productions of the earth, upon animals, and upon the human race. You then acquaint yourself with the form of government and the religion of each country; trace the influence of

these causes also upon the intellect, habits, and morals of men. You have now comprehended millions of millions of individual facts under a few general truths, which only require the modification that observation and experience will easily furnish. It is now only necessary for you to call to mind the latitude, natural features, government, and religion of any country or section of country on the globe, to be able at once, with considerable accuracy, to declare the whole catalogue of its produce, trees, fruits, plants, with their particular qualities; the entire race of its animals, reptiles, birds, and insects, with their peculiar forms and orders; and the physical, intellectual, social, and moral character of its inhabitants. Even if you have never heard or read a syllable respecting the productions of certain countries, you will never be left to suppose, as a man recently did, that pine-apples and cocoa-nuts are imported from Persia, or that coffee is raised in Holland, or figs and oranges in Patagonia, or rein-deer in Abyssinia, or fur and wool in the West-Indies; you will not look to the torrid zone, or to a flat and monotonous country, for the most vigorous intellects; nor to temperate zones for the most luxurious imaginations, or the warmest passions; nor to despotic governments for original and independent minds; nor to Pagan, Mohammedan, or Popish religions for intelligent and virtuous communities—because you know that these are not their appropriate soil. It was by a specific application of the same generic principle that our Saviour said, “Of thorns men do not gather figs, nor of a bramble-bush gather they grapes.”

In the same manner, learning certain general peculiarities in the physical features of a country, will help you to know and remember numerous particulars which depend upon them. The rivers of any country, for example, take their size, speed, and direction, from the size of its features, and the magnitude, elevation, and course of its mountains. When you have learned the one, you have already begun to learn the other by inference. You will not then look for any very large rivers in Great Britain or New-England, nor on the west side of the Andes, because the features of these countries are too small for them; but on the east of the Andes in South America,

and of the Rocky Mountains in North America, those vast elevations looking off more than a thousand miles to the ocean as their base, you will expect to find rivers of the largest size, with numerous tributaries to serve as the natural arteries of such countries. And so you find it over the whole globe, in respect to all the facts comprehended in physical geography. There is such a proportion between the relative members of the material universe, that a knowledge of a few of the most important members, will impart to a scientific mind a ready knowledge of all the rest. It is on this principle that the science of comparative anatomy is founded; so that the student by seeing only a bone or the fragment of a bone, or a tooth, will give you the anatomy of the whole frame to which it belongs.

In this way the study of geography will soon become a delightful and profitable exercise of intellect, judgment, sagacity, and philosophical discrimination, as well as of memory; pouring valuable knowledge into the mind through all these inlets. And thus you will find it, in every department of study and of enterprise; when you have faithfully surmounted first difficulties and secured the essential principles or steps of a subject or of a course of business, the rest of the way is comparatively easy. The young man on entering upon business, finds his greatest difficulty in getting well-started. But patience and perseverance in well-doing will always succeed at last, and great is the reward.

In further illustration of our doctrine, take the subject of geology. When you have learned the primitive, transitional, secondary, and tertiary formations, with the geological features of a country, you will know without further information where to look for granite; where for limestone and marble; where for iron; where for coal; where for salt; where for gold and silver; where for pure water, etc. You will not then expect to find granite in the American middle and western states; or the transitional lime-stone and marble in primitive districts; nor iron in secondary rocks; nor coal in the White Mountains, or to much extent and perfection in any part of New England; nor salt in the Green Mountains, or any other primitive districts; nor gold and silver in secondary or tertiary formations; nor the purest water in a flat, alluvial, or vegetable soil. If the above

minerals or metals are found at all in such places, you will know that they are away from home, that they have been carried there by a deluge, or some convulsive and disturbing cause in nature; and that they do not of course probably exist there to any considerable extent. The natural home of all these things can be definitely ascertained by geological principles.

In *moral science*, or the science which treats of our moral relations and duties, are certain self-evident truths, from which may be clearly demonstrated the first great principles in morals, to which individual truths and duties are so related, that they will guide you safely through all your inquiries after truth and duty. If ever you lose your way and get into doubt or difficulty in a subject that is very complex, you have only to revert to some of the first principles which you have established including the case in question, and you will easily detect your mistake, correct your error, and see your way clear again.

Suppose for illustration, that from the self-evident truths, that we exist; that we think; that, as free moral agents, we will and act; that we love and hate; that we are social beings; that we can benefit or injure one another; that, inasmuch as every effect must have an adequate cause, we owe our existence to some superior Being, who sustains and protects us—you proceed to establish some of the great moral principles, that we are accountable for our conduct; that we ought to render supreme homage to the Supreme Being; that benevolence is the essential element of moral happiness; that we ought not to injure ourselves, but to pursue the course which will make us most happy for ever; that we ought to be benevolent towards all men, and do them good as far as we can. Now take any one of these principles and carry it through that whole department of moral inquiry, of which it is the law and the light. For instance, take the principle that you ought, to the extent of your ability, to do that which will most benefit yourself and your fellow-men. Apply it to all your pursuits and relations; to your business in life, and your manner of pursuing it; to the cultivation of your intellect and heart; to your social habits; to the care of your health, to the influence which you do or may exert upon the physical,

intellectual, social, civil, moral and eternal interests of your fellowbeings—you will find that this principle will serve from the infancy of your moral being as a lamp to your feet, conducting you safely in the path of duty at all times; till it presents you, with those whom you have blessed, before the throne of God in heaven, rejoicing together in the glory of his kingdom. The same will prove true, if you carry out and apply any other of the elementary principles of moral science. I can, of course, only give a single example for illustration.

I have thus endeavoured to show you that the universe, the great store-house of knowledge, is not a confused and chaotic jumble, as it strikes the unscientific eye; that when you have acquired the science and application of its elementary laws, knowledge will flow into your mind much more easily, naturally, rapidly, and delightfully than you could have at first supposed; and that as you proceed, you will everywhere find order emerging from chaos, light from darkness, truth from error, unity from complexity, Divinity and design from atheism and chance, till your charmed and exulting spirit will see the glory of God bursting forth on all sides; and as is said of heaven, so will it begin to be said of your soul, that there is "no night there."

As many young men now enjoy frequent opportunities of hearing public lectures on subjects of literature, science, history, etc., it may be well to notice here the way in which you can render them most profitable.

In the first place, then, do not attend more than you can prepare for. No person can hear a lecture to advantage without some previous preparation. The mind must first possess some knowledge upon a subject, before it can well acquire knowledge upon it from a public lecture. To go to a lecture without having previously acquired some knowledge and interest respecting the subject of it, is like going to the market without any money to buy with. You will carry nothing away, unless it is forced upon you. In colleges, students are always required to study a subject before hearing lectures upon it.

In the second place, have a wise choice of the lectures you attend. Select the best, and those upon subjects respecting which you judge it most important to acquire knowledge.

In the third place, do not attend merely to hold your dish and catch whatever chances to fall into it for your gratification, but attend to aid your investigation of principles and facts, to exercise your own intellect and judgment, and to incorporate with your own mind whatever of knowledge may be acquired.

In the fourth place, take at least as much time after a lecture as you spend in hearing it, to think upon it, to digest it, and to write down in your note-book in a place headed with the subject of the lecture, whatever important principles or facts you may have learned.

Now all this may seem to you, at first, a hard and unwelcome task; but it will soon become easy, and its fruits will abundantly appear. You will thus acquire such a mental habit, that whatever you hear will put you to thinking and investigating; and your philosophical memory will be able to carry away from every lecture, all that is most essential and important.

You may indeed frequently hear lectures that contain but little thought, and that illogically arranged. Owing to a want of mental discipline in the speaker, there may be a confounding and misapplication of principles and a jumbling together of facts incongruous and impertinent, the effect of which you may realize in the blur and confusion cast upon your mind, as one is conscious of indistinctness of vision produced by spectacles which do not bring the rays to a focal point, but the reason of which you will not perceive, till you learn what is implied in the scientific presentation of a subject; just as one will not perceive why the spectacles confuse his vision, till he learns the science of optics.

But if you attend upon lectures in the manner above indicated, an occasional exhibition of this kind will do you no injury. You will thus learn to distinguish between the wheat and the chaff; and whatever sets you to thinking and invests your mind with elementary principles clearly elucidated, will stand in profitable contrast to confusion of thought, empty declamation, or mere commonplaces.

In this way, you may not only derive satisfaction, but may grow in valuable knowledge, as the fruit of every lecture you hear.

The same general directions are ap-

plicable to the hearing of lectures upon moral and religious subjects. If you are attending a course of biblical lectures, it is well to know beforehand what portion of Scripture or what subject comes next, and before hearing the lecture to exhaust your own intellectual strength upon it. Read and think upon it; let your mind feel its difficulties, so as to know what it needs to learn; let it thus become alive to the subject; then will it sympathize with the speaker, enter in earnest into his explanations and proofs, and gather up and use all the knowledge which he presents.

The same directions apply also to the hearing of discourses upon the sabbath. A great deal of preaching is lost, because hearers have too little interest respecting the subjects discussed to acquire knowledge upon them. When they cry after knowledge, and lift up their voice for understanding, when they seek it as silver, and search for it as for hid treasure, they cannot fail to grow in religious knowledge under the faithful preaching of the gospel. If you only give that effectual and earnest attention to religion which you must afford to other grave subjects, in order to understand them; if you attend to the most important evidences for the inspiration of the Bible, and ascertain the most essential principles, doctrines, and duties which it professes to teach; so as to know enough to be desirous to know more, you can scarcely listen to a religious discourse without hearing something to enlarge your knowledge, enlighten your understanding, remove your difficulties, increase your faith, and warm your heart.

Knowledge is not tantamount to piety. Men may have "all knowledge"—and still have no religion. Yet is the understanding the natural avenue to the heart, and the kingdom of God is a kingdom of light. Through the perverseness of the heart there may be knowledge without piety, yet there cannot be piety without some knowledge; and, other things equal, the more there is of knowledge, the more expanded and elevated will be the piety of the soul. Hence religious knowledge is most important, and lays an indispensable demand upon a portion of your time and attention. No young man of fair mind and sober judgment will deny this. To obtain a correct knowledge of the being and perfections of God, of his government,

and of our moral relations and duties, is the noblest and richest achievement of the human intellect. Nothing else so lifts up the spirit from the dust; nothing else so amplifies the mind; nothing else so vitally concerned with our temporal and everlasting well-being.

Nearly all the infidelity in our land is promoted and sustained by ignorance. With few exceptions, those who turn away from the religion of the Bible and pronounce it priestcraft and superstition, are those who never examined it at all; and, without any exception, they are those who never examined it faithfully. The whole army of infidels of every grade, from the grossest atheist to the most self-wise deist, who are coming up upon our land, like the frogs and the locusts and the lice of Egypt, are such because they wish to be such, and have never taken the trouble to look into religion. In the pride and sensuality of their hearts, they are quite willing to think the religion of the Bible a feeble and childish affair, got up by priests, and adapted to the weak and credulous, but quite beneath them! Poor, silly things!

"Like brutes they live, like brutes they die."

While the Bacons, and Newtons, and Lockes, and Edwardses, and Davises of every enlightened age and nation, whose transcendent intellects have explored the physical and the moral universe, from slumbering atoms beneath our feet up to worlds and suns rolling on high; and from the first movement of the human mind, to its loftiest efforts of ratiocination and demonstrations of moral truth—have received the Bible as the undoubted word of God, and have found its revealed truths to be worthy of their profoundest reverence and their most exalted praise, it is enough for these wise ones to turn the lip of scorn, and resign themselves up unmolested to the vile pleasures and the miserable fruits of sin.

And now, my young friend, I leave the subject with you. The Being who made you, has singled you out from millions of our race; he has placed you in a spot brilliantly illuminated with the lights of science, and highly charged with incentives to knowledge. With his own finger he is pointing you upward to his fair temple in the skies, and indicating that he has some great design and some superior destination for you. He

is calling upon you by motives which make angels flaming spirits in his service, to lift up your voice for understanding, and to seek after knowledge as for hid treasures. Truly a price is put into your hands to get wisdom. Shall it be written on your grave, that you had no heart to improve it? Count the loss and the gain on both sides, as you look down the long ages before you, and then tell us what you will do. If you will stedfastly address yourself to the pursuit of knowledge, and acquaint yourself with God and be at peace with him, on the authority of everlasting truth and experience, be assured that the pleasures of indolence and sensuality, which you relinquish, will be a thousand times repaid by the noble and abundant pleasures of the mind which you will soon begin to realize; pleasures which will steadily increase as you proceed, will survive the grave, and grow into immortal and full fruition in heaven. Your rising sun will go forth in its strength, waxing brighter and brighter unto the perfect day; till it will finally stand at high noon, full orb'd and cloudless, and pour its everlasting splendour upon your head in the paradise of God.—*Hubbard Winslow.*

OLD HUMPHREY ON THE FOOTMARKS
IN THE SLOUGH.

IF I were to give an account of half the scrapes that I get into, many a hearty laugh would be indulged in at my expense. An old man appears absolutely ridiculous, in many situations, wherein a young one would hardly excite attention. The other day, in attempting to go the nearest road to a cottage, I got so completely set in a clayey slough, that I could not, for a season, stir backwards or forwards. There I stood waving my hand in the air, to keep my balance, my right foot bedded up to my ankle in the clinging clay; while the other was only uplifted for a moment, afterwards to fathom a deeper depth. Down went my foot, and up squirted the muddy water over my clean lambs'-wool stockings, as unerringly as if a well aimed squib had been purposely directed against my legs. I certainly did cut a most deplorable figure.

It is well for me that in such circumstances I can generally extract amusement from my calamity; and, what is yet better, the merriment of my heart is

frequently followed by a profitable reflection; it was thus with me in the case alluded to. Most likely I should have backed out of the bog, and given up my visit to the cottage, had not some footmarks, in the clayey slough, caught my attention; these plainly told me, that, bad as the place was, travellers had found their way through it. I took courage at the thought. "There are footmarks in the slough," said I; "somebody has been here before me."

Christian reader, if thou art in the right way to heaven, it is likely enough that thou art passing through "much tribulation;" now look well at thy condition, however sad it may appear, and see if thou canst not take comfort that "there are footmarks in the slough."

Is thine a trying condition? art thou knocking at mercy's gate to obtain forgiveness of sins, and the hope of everlasting life, and does it not yet appear to be opened? Thine is a sorrowful condition, but keep up thy courage. "There are footmarks in the slough," say in the very slough in which thy feet are sticking. The Canaanitish woman passed along the same way, and was as fast set, for a time, as thou art; but mark how gloriously she came out of it. "O woman, great is thy faith, be it unto thee even as thou wilt!" Matth. xv. 28.

Art thou in a tempted condition, urged on by a vigilant enemy to commit sin? There are footmarks in the slough. Mark well how Joseph escaped out of this place; keep close to his footsteps, and thou shalt escape too. "How can I do this great wickedness, and sin against God?" Gen. xxxix. 9.

Art thou in a backsliding condition, ready to give up all, because thou hast departed from the right way? "There are footmarks in the slough." Royal footmarks are before thee; the man after God's own heart came here, and bitter were his lamentations; yet he recovered his footing, and was restored unto favour: for "if we confess our sins," God "is faithful and just to forgive us our sins, and to cleanse us from all unrighteousness," 1 John i. 9.

Art thou in a rebellious condition? Is thy heart cavilling with, and replying to the Lord, under the mysterious dispensations of his providence? There are footmarks in the slough. Jonah floundered here till he got weary of his life, and thought that he did "well to be angry," even unto death. Humble thy-

self under the mighty hand of God; and the Lord who spared Nineveh and Jonah also will deal as gently with thee; for "he is gracious and merciful, slow to anger, and of great kindness," Neh. ix. 17.

Art thou in a benighted condition? Hast thou no light to see the road before thee? Have neither sun, moon, nor stars appeared for many days? "There are footmarks in the slough." Behold the footmarks of the patriarch Abram, who travelled here! when called by God to go forth out of his country, and he journeyed, "not knowing whither he went." Notwithstanding the horror of great darkness that fell upon him in this place, "to the land of Canaan he went forth, and to the land of Canaan he came." "Who is among you that feareth the Lord, that walketh in darkness, and hath no light? let him trust in the name of the Lord, and stay upon his God," Isa. l. 10.

Art thou in a persecuted and despised condition, suffering shame and reproach for thy Leader and Lord? There are footmarks in the slough. I should marvel if thou couldst tell me of a saint on earth, or in heaven, who has altogether escaped this place. Nay! Moses even turned out of a smooth path to wade through this quagmire, preferring it to the pleasant paths, and broad high roads of the land of Egypt. Here are the crimson footprints of those who suffered even to the death; "not accepting deliverance, that they might obtain a better resurrection." It was in this spot that John the Baptist was beheaded. Here Paul was stoned and left for dead. Here Stephen cried out, "Lord Jesus, receive my spirit." The noble army of martyrs perished here; and I cannot promise thee a clear escape from it, any more than thy brethren; but I know that he will never leave thee, nor forsake thee, who has said, "Be thou faithful unto death, and I will give thee a crown of life," Rev. ii. 10.

Art thou in a suffering condition, afflicted in mind, body, and estate; eating thy bread in bitterness, watering thy couch with tears? "There are footmarks in the slough." Observe how deep Job sank in this place, yet he came out again, and found a better road than he had ever known before. "Our light affliction, which is but for a moment, worketh for us a far more exceeding and eternal weight of glory," 2 Cor. iv. 17.

Art thou in a desolate condition? Alone, destitute, forsaken? Is "lover and friend put far from thee, and thine acquaintance into darkness?" "There are footmarks in the slough." Hagar and Elijah laid themselves down in despair in this place; but God appeared for them when they cried to him. "Can a woman forget her sucking child, that she should not have compassion on the son of her womb? yea, they may forget, yet will I not forget thee," Isa. xlix. 15.

Art thou in a desponding condition? and dost thou envy the ungodly? Art thou ready to faint in the furnace, and cry, It goes well with the wicked. "There are footmarks in the slough." David's foot "had well nigh slipped" here. Good old Jacob was tried hard here, and began to think his grey hairs would go down in sorrow to the grave. "All these things," said he, "are against me." But he had good reason to alter his mind after that, and see things in a very different light. "Trust in the Lord with all thine heart; and lean not unto thine own understanding. In all thy ways acknowledge him, and he shall direct thy paths," Prov. iii. 5, 6.

Art thou in a dying condition? There are footmarks in the slough—footmarks in the dark valley! Thousands, who cried out in this place that they should sink to rise no more, are now casting their crowns before the throne of God, and singing everlasting praises to the Redeemer, who lifted them out of the terrors of death, and gave them victory over the grave.

Take courage, then, Christian reader, and be assured, there shall no temptation befall thee, but such as is common to man. However sad thy condition, somebody has been in it before thee. "There are footmarks in the slough."

THE PEOPLE OF MADAGASCAR.—No. I.

PHYSICALLY considered, the various nations now inhabiting Madagascar appear to form two distinct races; in many respects totally dissimilar, and having each a separate, and probably remote origin. Between these races the distinction of colour is marked and permanent. The peculiarities of the dark race are, a black complexion, and a taller stature than the olive-coloured tribes, stouter body, thick projecting lips, curly, or frizzly hair, a

frank and honest bearing, or a grave or timid expression of countenance; some of the tribes exhibiting a full bust, resembling the Africans on the Mozambique shore.

The fairer race, including the Hovas, and many individuals among the Betsileo, the Betsimisaraka, and Betanimena, but especially the Hovas, are distinguished by a light olive or copper skin, smaller stature, long hair, dark hazel or black eyes, erect figure, courteous and prepossessing address, active movements, with an open and vivacious aspect.

All the tribes have naturally fine and regular teeth, beautifully white, which is to be ascribed to their practice of washing them regularly, and cleaning or bleaching them by the use of a dye or pigment, made from the baingio, a native plant. The former race probably emigrated at some remote period from the adjacent coast of Africa. The latter have evidently one origin in common with that singular and astonishing race, whose source is yet involved in mysterious uncertainty, but

"Whose path was on the mountain wave;
Whose home was on the sea."

Whose spirit of adventurous enterprize led them, at a period when navigation was almost unknown in Europe, to visit the borders of Africa and of Asia; and whose descendants now people the shores of the straits of Malacca, the Malayan archipelago, and the chief clusters of the Polynesian islands.

We have no better means of ascertaining the period at which the distant tribes now inhabiting Madagascar arrived on its shores, than we have of tracing the several races to the sources of their origin. The dark-coloured natives appear to have been the earliest settlers in the island, and may therefore be considered as the aborigines of the country, as tradition respecting the settlement of the fairer race invariably represents them as having, at the time of their arrival, found the country inhabited. Their languages do not assist the inquiry; for they have been so intimately blended, as to present, in those spoken by the distinct races respectively, fewer peculiarities than are in other points observable among those by whom they are used.

We have already seen that the physical peculiarities of the several tribes now constituting the population of Madagascar, are considerably diversified; and

serviceable as an acquaintance with their distinctions might be, in aiding our inquiries into the origin of the nations now peopling our globe, and the means and the course by which many tribes of the human family reached the countries which they now inhabit, these points are, when the mental and moral qualities of the people are regarded, comparatively unimportant. We contemplate their intellectual habits and powers, and their peculiarities of mind with greater satisfaction, and derive from these, when viewed in connexion with their physical constitution, new evidence, not only of the fact that God has made of one blood all the nations that dwell on the face of the earth; but that he has endowed them with faculties of a corresponding order: and that, while the same variety is observable in this as in other points of the Creator's workmanship, all the essential elements of our intellectual nature belong equally to the several portions of mankind; and that the elevation, strength, and vigour these attain in some, and the imbecility and prostration to which they have sunk in others, are to be ascribed to the culture bestowed, and the direction given to the one, and the neglect, indolence, and vice, by which the other is degraded and destroyed. And though the lineaments of their character show, with affecting distinctness, how largely they have shared in the calamities which sin has inflicted on our race, a knowledge of this will not diminish our concern for their welfare, nor suppress our desires to become more intimately acquainted with their circumstances.

In order to a correct view of the Malagasy, some account of their mental and moral qualities is necessary. In noticing these, we observe, that the intellectual power of the Malagasy are not inferior to their physical qualities. Their mental faculties, though, in the majority of cases deteriorated by sensuality, enfeebled and cramped in their exercise by the juggleries of divination and sorcery, and the absurdities of superstition, are yet such as to warrant the conclusion, that they are not inferior to other portions of the human race; that if liberated from the debasing trammels by which they are now confined, and favoured with enlightened and generous culture, they are capable of high mental excellence.

Among the dark-coloured race, the

Sakalvas manifest the greatest intellectual vigour, uniting a remarkable quickness of perception, with a soundness of judgment; but we are not so well acquainted with any of these as with the fairer portion of the inhabitants, especially the Hovas, and to them chiefly our observations refer. Their mode of thinking, as described by Mr. Baker, who was for many years connected with the mission at the capital, is generally clear, definite, and consecutive; also prolix in introducing a thought, but distinct and pointed in exhibiting the thought itself, shrewd and ready in argument or dispute, frequently enforcing their opinions with perspicuity, order, and confidence. Like all uncivilized nations, they are, however, exceedingly averse to intellectual effort; and hence, though their mental exercise is prompt and lively, they do not seem to possess the qualities of mind requisite for close and continued thought. The imagination is in most frequent use, and like all uncivilized nations, they are fond of metaphors, unfolding or applying many of their popular maxims by allegory or fable.

The almost entire absence of abstract nouns in the language of Madagascar indicates one general peculiarity in the mind of the nation, and has probably exerted considerable influence in continuing, if not in originating the modes of thinking most prevalent among the people, rendering them so much more familiar with sensible, than with intellectual objects. Facts, anecdotes, occurrences, metaphors, or fables, relating to, or derived from sensible and visible objects, appear to form the basis of most of their mental exercises. This also, in all probability, augments the impurity of those chambers of imagery which their imaginations create, and in which it appears to afford them delight to revel.

Notwithstanding mental application is in general so irksome, their acquaintance with numbers, the extensive calculations many of them make, their keenness in barter or trade, their system of government, and many of their usages, indicate considerable strength of mind; and when a stimulus sufficiently powerful is applied, they have shown in many instances no natural deficiency of clear and vigorous intellectual faculties; while the specimens of eloquence and poetry, few indeed in number, with which we are acquainted, cannot be regarded but as the fruits of native genius of no common

order. The introduction of letters, the general diffusion of education, and the labours of the press established among them, are already producing the most extensive and beneficial effects, in exciting the long dormant energies of the native mind. Many, in an exceedingly short space of time, have been able to read their own language with correctness and fluency; while others in the more advanced state of their education, have advanced with equal rapidity.—*Ellis's Madagascar.*

SCIENCE AND REVELATION.

THE progress of human science has been retarded by many and great obstacles. Among these is the operation of the idea that it is unfavourable to the cause of Divine truth. Assuming that certain views of the Scriptures must be correct, and that these are opposed by the statements of modern philosophy, its abettors have been aspersed, and in some cases stigmatized as absolutely deistical.

A memorable instance of this kind occurred in the history of Galileo. In the use of the telescope he had constructed, as the first astronomer in whose hands such a gift was placed, he made many and important discoveries, all of which furnished fresh arguments in favour of the system as described by Copernicus. Ambitious to propagate the truths he contributed so powerfully to establish, he anticipated that they would be received with gratitude by all. But he had mistaken the character of the age and the disposition of his species. The very system which had been discovered by a humble ecclesiastic, yet patronized by a bishop, published at the expense of a cardinal, and even warmly sanctioned by the pope, was doomed after the lapse of a hundred years, to the most violent opposition, as subversive of the doctrines of the Christian faith.

Galileo was summoned to appear at Rome, to answer for the opinions denounced as heretical, and after a mild sentence pursued his former course. Before six years had elapsed, he published his dialogues, the concealed object of which was to establish the opinions he had been compelled to promise to abandon, hoping by the mode he adopted to escape notice. For nearly a year this was the case, but when it was seen that the obnoxious tenets were every day

gaining ground, he was again cited before the tribunal of the Inquisition.

The decree was issued in consequence, that his work should be prohibited; that he should be condemned to prison during pleasure; and that during the three following years, he should recite once a week, the seven penitentiary psalms. Most humiliating to himself and degrading to philosophy was the result. At the age of seventy, on his bended knees, and with his right hand resting on the Evangelists, did he avow his present and past belief in all the dogmas of the Romish church, abandon as false and heretical, the doctrine of the earth's motion and of the sun's immobility, and pledge himself to denounce to the Inquisition any other person who was even suspected of heresy! The church to which he thus abjectly engaged to adhere, has ever been the opponent of knowledge; for ignorance has proved the mother of its devotion. No wonder need therefore be felt at the forging or the imposition of its iron bands. The only matter of surprise is that this patriarch of philosophy did not prefer truth to life. One ray of light falling on the thick darkness in which his persecutors were shrouded, might have revealed the fact that the Scriptures speak of the heavenly orbs as they appear to be, and that they are designed not to imbue us with philosophy, but with pure religion. Were physical science indeed a fit subject for revelation, it is difficult to conceive at what point a limit to it could have been set. A communication of so much only of astronomy as was known to Galileo would have seemed imperfect after the discoveries of Newton; and that of the science of Newton would have appeared defective to La Place. If, too, light were thrown on this department of science, why should it not be on others? And thus the requirement which some venture at least tacitly to make, is that of a full development of all the mysterious agencies that uphold the mechanism of the material world.

It is affirmed on Divine authority, that if all that Jesus said and did had been recorded, "the world itself could not contain the books that would have been written." The hyperbole employed shows, that such a history could not have been available; and assuredly this would have been the case with such a physical record. The very idea is dazzling and overwhelming. It might indeed be

sued to more exalted beings, and the study of such a revelation will most probably form one of the engagements of the redeemed above. But the Bible is just what we want; "a lamp to our feet and a light to our path;" and he, who follows in the path it illumines shall not err.

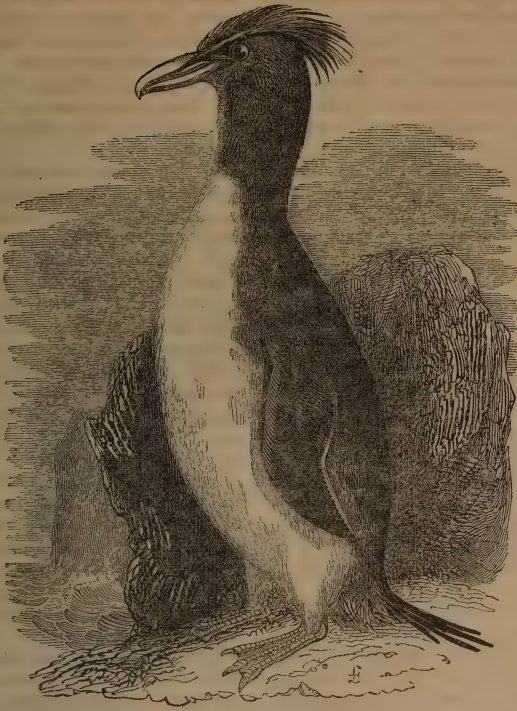
In dependence on that Holy Spirit by whose inspiration "all Scripture is given," it is for us to make it our study; wishing well at the same time, to the advancement of true knowledge in every form. Only let there be the accumulation of incontrovertible facts, and in reference to these just and accurate reasonings, and to error alone can the issue be detrimental. Truth, which would prove fatal to the church of Rome, is the glory of the church of the living God. S. S.

INSECT ECONOMY.

INSECTS are found in every part of the world, even in the smallest islands. In very cold regions, however, they are not numerous; they live in every situation; on land and in the water; in fresh waters, as well as in the sea. Many inhabit the water in their larva or caterpillar state; then go below ground to pass the period of their existence as a pupa; and, when become perfect insects, mount into the air. Their food is various; some live on filth, and on dead carcases; some live on animals; man himself is subject to their attacks; many feed on plants; some migrate from one region to another, as the locusts; and some species are as extensively spread over the face of the earth, as are the species of plants on which they feed.

Larvæ often feed on matter which when perfect insects they will not touch. Many gnaw the roots of plants; as the larvæ of the meloe, and of several of the phallænæ. Others penetrate the wood, as the pînus; and most of them eat the leaves. Such as live on other larvæ must employ some artifice to entrap their prey; and how wonderful are the wisdom and the instruments given to each voracious species, suitable to its nature and circumstances.

Perfect insects likewise live on food of different kinds; for the most part, they suck the juices of other animals or of plants; as butterflies, muscæ, (flies) etc., and others in the perfect state probably never take any nourishment, as the ephemera, etc. H.



CRESTED PENGUIN.

AMONG the oceanic birds which make the island of Tristan da Cunha their resort, both as a resting place and a nursery, in which to incubate and rear their young, the beautiful crested penguin (*Aptenodytes chrysocoma*, Gmel. *Catarrhactes chrysocoma*, Briss.) is one of the most remarkable. Captain Carmichael, in his description of this island and its products, remarks, that "the crested penguin conceals itself among the long grass, and on the bottoms of the ravines where they open upon the shore. Here they assemble in countless multitudes, and keep up a moaning noise, which can be heard at a great distance, and which, combined with the roar of the surge, re-echoed from the mountain, and the bold inhospitable coast around you, is calculated to excite a train of ideas by no means pleasant. It is owing, perhaps, to the scantiness of its plumage that the penguin swims heavier on the water than any other bird; no part of it, except the head, appearing above the water. This gives it, undoubtedly, a

peculiar facility of diving and pursuing its prey under the water. With the same view, perhaps, its eyes appear to be uncommonly sensible to the stimulus of light. In every bird that I had an opportunity of examining, the pupil was contracted to a mere dot." Mr. Campbell, in his description of his voyage to the Cape, notices the occurrence of penguins at Tristan da Cunha, which were no doubt of the same species as those seen in such multitudes by Capt. Carmichael. Other species, however, probably visit the same island.

The penguins (divided by Cuvier and others into three genera) constitute a group of oceanic birds peculiar to the southern ocean: they are not intertropical, but range from the frigid to the temperate latitudes, south of the tropic of Capricorn, and in these seas take the place of the auks, and especially the great auk (*Alca impennis*) of the northern ocean. Structurally modified, not for the land, on which they are constrained and awkward, nor for the air, into whose regions nature has forbidden

them to rise, but for the watery element, in which, like the seal, they are completely at home, the penguins present, in the peculiarities of their conformation, a subject of the highest interest, not only to the philosophic naturalist, who delights to trace the phases of organization, through the great chain of the animal kingdom; but also to the natural theologist, who, in the contemplation of structural departure from a general model, in order to meet a given end, the adaptation of parts to the accomplishment of some design, beholds a striking proof of the wisdom and power of the Almighty, carrying conviction to his reason.

The penguins stand in the same relationship to birds as do the seals to mammalia; and as the limbs of the seal are converted into paddles, in order to render it fitted for its destined mode of life, and the successful chase of its slinky prey, so are the limbs of the penguins converted into aquatic organs—paddles if you please—in order that they may propel these tenants of the deep through the yielding water. A modification in the structure of one organ, requires a corresponding modification of every other; harmony is a law of nature; we need scarcely say, therefore, that the penguin exhibits in the totality of its organization, an express adaptation to its appointed mode of life; with the conversion of the wings into aquatic paddles, which, as must be evident, can only be effectually used, on the proviso that the body be submersed to a certain depth, shall we find a correspondence in the weight, the figure, and the clothing of the body, in the structure of the skeleton, and in the texture of the bones.

Dr. Carmichael suggested, that to the scantiness of its plumage is to be attributed the reason why the penguin swims heavier (deeper) in the water than any other bird. In this view of the case, Dr. Carmichael has not succeeded. We must look for it in the weight of the body itself, which we shall find to be specifically greater than in other birds. It may be stated, on broad principles, that the weight of all animal bodies is adapted to the part they are destined to play, with reference to the land, the water, or the air. Animals destined exclusively to move on the solid ground, are specifically heavier than such as are organized for aerial progression; and such as float in the water have an average

medium between the two. In the structure of the feathered race, we behold a combination of muscular vigour and lightness of body. The extent of the lungs, the thickness and hollowness of the bones, permeated by rarified air from the lungs, with which they communicate, and the absence of those masses of muscles, which the skeleton of a quadruped has to sustain, are circumstances conducive to this end. The pectoral muscles, the very situation of which steadies a bird in the air, (as ballast a ship in the water,) exceed in weight all the rest of the muscles put together, and often nearly equal the weight of the whole body, exclusive of them. Hence a bird is capable of easy flight, and of sailing with outspread wings on the higher regions of the air. Now, though this law, in reference to the feathered race in the aggregate is correct, still it is not without exceptions; in the penguins, for example, the exception is remarkable. Were the penguin, with its shape unaltered, specifically as light as the swallow or heron, it would float like a cork; diving would be a laborious task, and its paddle-like wings, (incapable of being only used, except while the body is submerged,) comparatively speaking, useless. The weight of the penguin is in fact such as incapacitates it for flight, even were its wings formed as in aerial birds; it is such as to sink the bird almost to the head in the water. Instead of having a light skeleton, consisting of hollow air-filled bones, with thin walls, the penguin has a dense, heavy, firmly knit, osseous fabric; the bones are all compact and dense; they have no apertures for the admission of air, and the slight degree of hollowness of those of the limbs is filled with thick oily marrow. The skin is thick and oily; the muscles are dark-coloured and heavy. Again, the large air-cells, so conspicuous in the cavities of the chest and abdomen of aerial birds, and which are connected with the lungs, are here, not only few in number, but of small extent. In many birds, these air-cells are carried out even between the skin and the muscles, not only on the body, but even along the limbs, so that the whole system is, as it were, inflated; but in the penguin, this beautiful and admirable apparatus is wanting; it is not only not needed, but its presence would be a defect. We now see to what the deep swimming of the penguin is to be attributed, and also why

its body should have a greater specific gravity than that of the heron or swallow. It is not, however, only in the weight of its frame that the penguin exhibits a proof of its adaptation to the watery and not to the aerial element; its figure, its clothing, and the situation and structure of the limbs clearly indicate its destiny. The body is boatshaped and compressed, of an elongated form, and covered with a dense waterproof clothing of silky feathers, closely compacted together: the whole presenting a smooth and glossy surface. This vest of feathers thus modified, is closely adpressed to the skin. The importance of such a clothing to a bird, the greater portion of whose existence is passed in the water, must be evident; we see an approach to this style of plumage in the grebes and in the cormorants, where it obtains principally on the under surface of the body. In these birds, however, it is deeper, fuller, and less closely adpressed than in the penguin. In all truly aquatic birds the legs are placed more posteriorly than in birds of arboreal or terrestrial habits. This position of the limbs, while it renders progression on the ground awkward and embarrassed, (the body being, as it were, overbalanced before,) contributes to the ease and rapidity of aquatic progression. In the grebes and divers, this position of the legs is very remarkable: the limbs in these birds seem, like the hinder flippers of the seal, to terminate the body; and are moreover modified into efficient paddles. In the penguin the situation of the legs is so posterior, that in order to maintain its balance when on shore, the bird is obliged to stand upright, and to walk, or rather hobble along in this singular attitude. A flock of penguins seen all standing in array on the shore, has a very remarkable and novel appearance; and as they are collected together in long ranks, they resemble a marshalled body of soldiers. The tarsi are very short and strong; the toes are three in number, united by intervening webs, besides an inner toe, which is small and free; this is, in fact, the hinder toe in a rudimentary condition directed forwards. The feet of the penguin not only serve as paddles, but in a great measure as a rudder; for the tail is very small, and in some species reduced to the minimum of developement. In the grebes and divers, the tail is in a similar condition. In the cormorants, however, it is ample,

and consists of rigid feathers, the shafts being like slips of whalebone; here it acts as an efficient rudder. The chief organs, however, of aquatic progression, in the penguin, are its paddle-like wings. In the great auk, the wings are also paddles; but in the great auk they are less completely so, inasmuch as the usual feathers of these organs are to be made out, though they are extremely short and small. In the penguin, on the contrary, the paddles are universally covered with layers of small rigid scale-like feathers, lying as close as possible, and forming a thin, but compact covering to the skin.

Comparing these organs with the wings of birds capable of flight, it will be at once perceived that their condition may be regarded, to a certain extent, as rudimentary; they are contracted in their expanse, and are broad in proportion to their length, comparing them with the stripped wing of any other bird. Having to resist the pressure of a denser medium than air, having in fact to act vigorously on the water, their bones are short, thick, solid, and firmly knit together; they cannot be folded up as in other birds, but when not in use hang down on each side. They are moved by vigorous muscles. Thus are the penguins organized for the water, in which they are active and alert; their food consists of cuttlefish, fishes, and various kinds of mollusca. Of these singular birds, the crested penguin, (*Catarrhætes chrysocoma*, Briss.) though not the largest, is one of the most beautiful; it is celebrated for its aquatic activity, whence it has obtained the name of manchot sauteur among the French, and jumping penguin, or hopping penguin among the English. Though abundant on the isle of Tristan da Cunha, it is not exclusively confined to that spot, but inhabits other places, as the Falkland Isles, Van Diemen's Land, some parts of the shores of New Holland, etc. In the water they surmount any obstacle, as they swim along, by leaping over it, (as a fish leaps out of the water,) a feat which they perform with the utmost ease; nor is it always to clear any impediment in their course that these leaps are taken, but often apparently from mere playfulness, or in order to quicken their progress. The crested penguin is twenty-three inches in length; the bill is red, with a dark furrow running on each side to the tip; the upper mandible, three

inches in length, is curved at the end: the head, neck, back, and sides are black, as are the wings externally. The whole of the under surface is white; over each eye runs a stripe of pale golden yellow feathers, which lengthen behind into a pendent crest, nearly four inches long; but which can be erected at pleasure: the feathers, on each side of the head, above this crest, are longer than the rest, and stand upwards. The female has a streak of yellow above each eye, but not prolonged into a crest behind. The legs and feet are orange coloured. "This species," says Latham, "appears to be more lively than others; but, in fact, they are very stupid birds, so as to admit of being knocked down with sticks when on land, and are frequently so regardless as to suffer themselves to be taken with the hand. When enraged, they erect their crests in a very beautiful manner. They make their nests among those of the pelican tribe, living in tolerable harmony with them." "They are, however, mostly seen by themselves, seldom mixing with other penguins, and are often met with on the outer shores, where they have been bred. The females incubate in burrows, which they easily form by means of their bill, throwing out the earth with their feet: in these holes, the egg is deposited on the bare ground." "We learn from the Embassy to China, that these birds were found in vast abundance in the island of Amsterdam; often basking and standing erect in company with the seals." The mode in which the crested penguin incubates, in which point it resembles the little penguin of New Zealand, (*Cat. minor*), which is also said to make holes or burrows, differs from that of the Patagonian penguin, respecting whose habits, as observed by himself, when in high southern latitudes, Mr. G. Bennett gives an interesting account in the proceedings of the Zoological Society. He notices particularly "a colony of these birds, which covers an extent of thirty or forty acres at the north end of Macquarrie island, in the South Pacific ocean. The number of penguins collected in this spot is immense; but it would be almost impossible to guess at it with any near approach to truth, as during the whole of the day and night, 30,000 or 40,000 are continually landing, and an equal number going to sea. They are arranged, when on shore, in as compact a manner, and in as regular

ranks as a regiment of soldiers, and are classed with the greatest order, the young birds being in one situation, the moulting birds in another, the sitting hens in a third, the clean birds in a fourth, etc.; and so strictly do birds in a similar situation congregate; that, should a bird that is moulting intrude itself among those which are clean, it is immediately rejected from among them. The females hatch the eggs by keeping them close between their thighs; and if approached during the time of incubation, move away, carrying the eggs with them. At this time the male bird goes to sea, and collects food for the female, which becomes very fat. After the young is hatched, both parents go to sea, and bring home food for it; it soon becomes so fat as scarcely to be able to walk, the old birds getting very thin. They sit quite upright in their roosting places, and walk in the erect position until they arrive at the beach, when they throw themselves on their breasts in order to encounter the very heavy sea met with at their landing place. An admirable sketch of this species, and of the head singly, in order to show the characters of the restricted genus *Aptenodytes*, to which it belongs, will be found in the "Introduction to the Study of Birds," published by the Religious Tract Society, 1835, in which occurs a notice of other species also. M.

"DO IT, AND IT WILL BE DONE."

THIS was a favourite expression of my uncle Barnaby, or rather it was a frequent winding up of his directions or counsels, especially to young people. I have lived to see many instances of the good results attending a steady adherence to the habit which my uncle's often repeated hint had much to do in forming; and I have seen the most unhappy consequences follow the neglect of it.

I consider it ungenerous and self-delusive to charge upon others the blame of our own faults; and yet so intimate is the connexion between ourselves and those who surround us, and whose example we are in the habit of daily witnessing, that it is impossible to prevent the exercise of a mutual moral influence, or to free either party from sharing in the responsibility of the other. While fully conscious that neither the guilt nor the

inconvenient consequences attending a bad habit can be shifted, I cannot help in some degree connecting the formation of a habit which in my early years caused me much vexation and disgrace, with the influence of example to which I was continually exposed. The superintendent of our nursery was accustomed to postpone attention to duty with a promise to "see about it." To this circumstance I trace my early disposition when directed to do any thing, to satisfy myself with assenting and intending, and dismissing the subject from my mind without actually performing the thing required. Like the son in Scripture, on receiving the commands of my parents or master, I too often said, I go, sir, to perform them, but went not, Matt. xxi. 30. This arose not from a spirit of intentional disobedience, but from the beginning of a habit of procrastination. I feel thankful that it was in any degree successfully opposed; I regret that any lurking remains of it should yet exist in my character; and I would earnestly press on my young friends the wisdom of steadily resisting the first buddings of such a habit, and counteracting it by the adoption of uncle Barnaby's better principle, "Do it, and it will be done."

On my first visit to him, I was struck with the promptitude, order, and despatch of business which prevailed throughout the house, and formed a perfect contrast to the scene by which Mrs. Harris was surrounded. However, as was generally the case with fresh inmates in the family, I more than once came in for my uncle's admonition.

Cousin Frank was always condescending and good-humoured towards me; and accommodated himself to the wishes and capacities of a younger companion in no ordinary degree. Still, however, he acted by a plan; and sometimes when I applied to him to join me in play, he would reply, "I cannot come now, Samuel: I shall be engaged for an hour or more with my exercise." "What!" I inquired, "have you to write exercises in holiday time?" "Yes," replied Frank, "I must keep up my work, or I shall get behind hand when I return to school. Have you nothing to do in that way, Samuel?" "Only two of Esop's fables to translate." "Had you not better set about doing them?" "Yes, I can, to be sure, but there is no hurry: they will not take me long to do, and we have more than three weeks to come of

the holidays." My uncle came in, and heard the close of the conversation. "My boy," said he, "let me advise you now in the morning of your days to cultivate a habit of never leaving till to-morrow, not merely what absolutely ought to be done to-day, but that which might as well be done to-day—do it, and it will be done." On that occasion I took my uncle's advice, and I had no reason to regret it. I got my slate, and set about translating one of the fables; while thus engaged I felt very happy and really interested in my work; it seemed no burden to me. By an hour's application two or three mornings, the thing was accomplished; thus I had plenty of time to look it over, correct any little mistakes that had occurred in the translation, and neatly to copy it for showing up on my return. Then I had for nearly three weeks the positive pleasure of knowing that it was done. When an excursion was proposed, or a pleasant party of friends expected, there were no untranslated fables to haunt me, and prevent my enjoyment; and on my return to school, I was prepared at once to lay it before the master, and received his kind expressions of approbation. Besides, I had gained real improvement. The sentiments of the fables were impressed on my mind, and the verbal corrections suggested by my uncle or Frank fixed themselves on my memory, and advanced my knowledge of the language; and then, too, the pleasing recollection of that affair often served as a stimulus on other occasions again to act upon my uncle's maxim, which had resulted in so much satisfaction. I frequently coupled with it the recollections of a former vacation when I had only some trifling matter to commit to memory, but which had been deferred from day to day, and every pleasure embittered by the recollection, "But my poem is not learned." On the last evening before my return to school I sat up to a late hour, yawning and weeping over my book, which at last, overcome with weariness and disgust, I laid under my pillow, hoping to resume it with better success in the morning; then a hurried glance was all that I could bestow upon it. At school it was blundered through in a disgraceful manner, and left no trace of improvement on my mind.

It was not always that I was wise enough thus to act upon my good uncle's maxim. My dear mother, who was an invalid, and tenderly anxious about her

children, especially when absent, had desired to receive a letter from me on a certain day. It was my full intention to comply with her request. The matter was mentioned at breakfast time; my uncle gave me a message which he wished me to communicate to my father, and added, "Now you had better do it, and it will be done." Frank was going that day to visit some school-fellows of his: as the appointment had been made before my arrival, I was not invited. Besides, as Frank was to ride his pony, I could not conveniently accompany him; so I had the day to myself to write the letter. Having seen my cousin mounted, I went to the library for writing materials; but alas! I there happened to cast my eye on a book which contained a number of interesting experiments; I could not resist the temptation of trying only one—and only one more—still flattering myself that plenty of time remained for writing my letter, until, to my utter astonishment, I heard the sound of the dinner bell. I resolved to slip away from the table as soon as the cloth was removed, still hoping to accomplish my promise in due time for the postman. Unfortunately, a gentleman, accompanied by two little boys, called to see my uncle. They were invited to remain to dinner; this prolonged the meal beyond its usual time, and then my uncle desired me to entertain the young gentlemen, so that I could not make my escape. The postman's horn was heard, my uncle laid his letters on the table, and desired me to fetch mine; alas! I had not written a line of it. My uncle saw my confusion; he said little, but evidently looked surprised and displeased. The postman could not wait, and my letter was obliged to be deferred till the next day. Oh the compunctious visitings that embittered my feelings when I thought of my dear mother's disappointment and anxiety! I did indeed that evening write a letter of affectionate apology, but it had to lie by till the postman's next visit; and as it happened to be on Saturday, two days elapsed before it was on its way to soothe the wounded feelings of my tender parents. My uncle's message also, which was of some consequence, was inconveniently delayed, and I really felt ashamed to look him in the face; but my most distressing thoughts were about my mother. The return of the post painfully proved that my uneasiness on that score was not groundless; it brought a letter full of

anxious apprehensions about me, who had been the guilty cause of all; my mother was exceedingly distressed and agitated at not hearing; it was concluded that I must be ill; and my father entreated my uncle to write immediately and relieve them from their painful suspense. This was a lesson that I never forgot: from that time to the present I have accustomed myself to regard as absolutely sacred, my own promise to write on a certain day, or the request of an absent friend that I would do so. I must, however, acknowledge having more than once deferred writing to so near the moment of the post closing, as caused me to forget part of my communication, and perhaps laid me under an otherwise unnecessary obligation to write again in order to supply my former omission, thus giving point to my uncle's admonition, "Do it, and it will be done; do it, to secure against the uncertainty of its being ever done at all; and do it, to ensure its being well done, by allowing yourself time to do it properly without hurry and confusion."

My uncle had an extensive grapery, and took great pleasure in the production of fine and early fruit, with which to gratify his friends. The first grapes of the season were cut for a present to my cousin Mortimer, and the advancing succession was destined for other friends. My uncle observed that something was amiss with the lock of the hot-house door, and directed the gardener to get it set to rights. "Send for the smith directly," said my uncle, "or rather go yourself and fetch him, and see that it is done before night." My uncle was just setting out on a visit to cousin Mortimer, or he would not have contented himself with ordering the lock to be repaired, he would have seen that it actually was done; and perhaps, had he been at home, the gardener would have been so sure that his prompt and personal obedience would be looked after, that he would scarcely have ventured to delegate the trust. But master was just leaving home; and rare, as well as valuable, is the servant who never on that account in any degree deviates from the course of duty, or slackens his diligence in pursuing it. Edward contented himself with saying, "Yes, sir," and thought no more about the matter till next morning, when he opened the door, and by the imperfect manner in which it was fastened, was reminded of his neglect on the preceding day. "George," said he, to an under

gardener, "be sure you take this lock to the smith's, and get him to mend it; master ordered it to be done yesterday, and he will be home to-morrow." "Yes, sir," said George, and contented himself as Edward had done before him. On shutting up for the night, another remark was made on the omission, and another resolution formed that it should be attended to the first thing in the morning. "Indeed," said George, "there is no occasion to take it to the smith's at all; I could do it myself in five minutes: the spring has become rusty, which prevents the bolt shooting far enough; it only requires to be taken off and oiled." "Very well," replied Edward, "then, as master says, 'Do it, and it will be done,' and be sure it is done before master comes;" and so it was intended to be done. But, to the great consternation of both Edward and George, somebody had been there before them, and had cleared away all the ripe grapes, and a number of choice plants to the value of many pounds. There were no marks of violence to indicate a forcible entry having been effected. It was evident that the robbers had found an easy access from the simple circumstance of the lock being out of order. Both the men dreaded the return of their master, fearing that he might suspect them of being concerned in or having connived at the robbery. My uncle had no such suspicion; but his first question naturally was, "Had the lock been mended?" and very severe was the reprimand elicited by this instance of disobedience and neglect. It afterwards proved that the robbery had been committed by a lad occasionally employed in the garden, who had accidentally overheard the order of my uncle, and had observed also its non-fulfilment.

My uncle often advised us, if in the course of reading or conversation we met with a word which we did not exactly understand, immediately to look it out in the dictionary. I have often done this with satisfaction and improvement; but I have sometimes been tempted to delay it: the book was not in the room, or I did not like to break in upon the conversation, and I thought I would recollect the word and look for it when convenient. In such a case, the consciousness that there was a word which I intended to look for, would haunt me for days and weeks; but I do not recollect any instance in which, if once suffered to escape, it ever recurred to me again. I have sometimes

with shame asked Frank if he could tell me what word it was I said I would look for. He, too, has tried in vain to assist me, and we have generally concluded with, "Well, it shows that we ought to follow uncle's saying, 'Do it, and it will be done.'"

In like manner, my uncle used to advise us, if we met with a striking expression or interesting fact; whether in reading or conversation, immediately to make a memorandum of it in a common-place book. This I have always intended to do, and have thus accumulated a stock of valuable information; but my stock might have been much larger than it is, if I had always done as I intended, and not suffered myself to be put off with good intentions. I often remember now with mortification; or rather half remember, many conversations in which pointed remarks were uttered, sometimes by very distinguished individuals, which would furnish many an interesting anecdote or illustration, could I but recollect them with sufficient distinctness and confidence to give them with proper names; but as it is, I have only the vexation to see a confused and untangible something float before my mind's eye, which I cannot appropriate or use.

I remember calling with my uncle on several of his cottagers, to take them some seeds of a newly-introduced and very profitable vegetable which my uncle had just received from London. All of them seemed much pleased with the kind thoughtfulness of their landlord, and quite disposed to try the experiment. On our way home, we called again at one of the cottages where we had left a parcel of seeds, to inquire for an umbrella which Frank had left behind him. We knocked several times without being answered, and, concluding the family were all out, were taking our departure, when one of the children came in; father and mother, she said, were in the garden, clearing the ground and putting in the seeds that his honour had given them; and she had been sent to the Hall with the umbrella that the young gentleman left behind; for her mother said, "Take it at once, and then it will be out of harm's way, and ready if it should be wanted." The good man and his wife then appeared, bringing in their gardening tools. "You have been working late," said my uncle; "are you not very tired?" "Rather so, sir," replied the man; "but wife said we had better do it, and then it

would be done, and I thought so too ; so we both bestirred ourselves and set about it, it was not more than an hour's work : and now the seeds are in, ready for such weather as it pleases God to send us ; the weather could not help forward the seeds before they were put in the ground."

"Right, right," said my uncle ; "let our part be done diligently, and then we may humbly expect a blessing to prosper it."

About two months afterwards, in one of our walks, we called again on some of the cottagers ; my uncle was particularly concerned to know the success of the new experiment. In the several gardens there was a considerable disparity in the advancement of the crops ; but in none was the difference so striking as that of the cottager where we called a second time, and that of his next door neighbour. As the gardens were only separated by a dwarf hedge, we had an opportunity of seeing both together. The former presented a fine bed of vegetables, vigorous in their growth, and advancing to just such a stage of maturity as would fit them to stand the approaching winter. The other had but a scanty sprinkling of stunted plants, some of them precociously running to seed ; some languishing for want of moisture ; and not any that afforded a promise of surviving the winter, and requiting the owner for the ground they occupied. "How is it," inquired my uncle, "that your plantation is so much more flourishing than that of your neighbour?" "I cannot say, sir, I am sure, except it is the seed having been put in so much earlier." "Ah, I recollect, you sowed your bed the same night I brought you the seed." "I did so, sir, though I had a great mind to leave it till next day ; but wife said, Do it, and then it will be done. If you remember, sir, the rain set in that very night, and lasted a fortnight. Wife and I were glad enough to think that the seed was in the ground, and we once or twice asked our neighbour whether his were in ; but he said the ground was so wet it was impossible to dig it ; for that reason he was more than a fortnight behind us. Then came the long drought, which does not at all suit this kind of plant, which requires a deal of moisture, especially at first ; so you see, sir, he is not likely to have much luck with it this year ; but I shall be able to help him with a few of my plants ; for they will bear another thinning." "See, boys," said my uncle, addressing himself

to us, "the wisdom of promptitude in attending to business, and doing what ought to be done. By diligently employing your own energies, which you can command, you put your work in a position to receive every advantage of circumstances which you could not command, but which you may improve—advantages which the idle and procrastinating throw away."

We had a young companion occasionally visiting at my uncle's, who sometimes adopted the saying, and in a sense acted upon it, but not exactly as my uncle recommended. Arthur was a quick lad, and when any thing was proposed that took his fancy, he would set about it directly, and say, "I will do it, and then it will be done." He quickly surrounded himself with materials and implements, and worked away at a great rate. But he soon suffered himself to be diverted ; some new object was taken up, and the old one deserted and forgotten. Arthur was famous for clever, but unfinished projects ; and prompt, but not persevering activity. "Ah," said my uncle, "to begin a thing is not to do it. That one little Saxon word comprehends to commence, to carry on, to complete an enterprise ; and he who stops short of this can never say that his work is done." I have more than once known Arthur's experiments or projects fail for want of due attention to my uncle's exposition of the saying, "Do it, and it will be done." "To do a thing, means to do it properly, not half do it. Once well done, is twice done, or rather, done once for all."

If the dimensions and proportions of a piece of mechanism were mentioned, or the ingredients for a chemical experiment, my uncle would say, "Write it down, lest your memory should not retain it correctly." "I shall be sure to remember it," was generally Arthur's reply ; or perhaps he would make a pencilled memorandum on a loose scrap of paper. "You had better use ink, and insert it in a book, lest the paper should be mislaid, or the writing effaced." "This will do for the present, sir ; and I will copy it presently." But in nine cases out of ten no permanent record was preserved ; either the paper was lost, or the writing illegible, and Arthur's operations had to be carried on by guess work. The same character that stamped incompleteness and uselessness on the productions and attempts of his

boyhood, has marked and marred the undertakings of his riper years. It may be fairly questioned whether he ever carried on any one enterprise to perfection; and he is now filling a very different rank in society and in the esteem of his friends from that for which his natural abilities, advantages of education, and connexions, would have qualified him.

"Keep a regular account of your receipts and expenditure," was one of my good uncle's counsels, as it is of judicious parents and friends in general to a youth when first intrusted with the disposal of money; "and, whenever you have an entry to make, do it, and it will be done. If you trust your memory for a week, or even a day, it is ten to one but some articles are forgotten, and your account gets into confusion, perhaps that hopeless sort of confusion that would lead you altogether to give up the attempt to keep them regularly, or to keep them at all." In the days of my youth, during a short recess from business, Frank and myself were trusted together on a pedestrian tour through part of Wales. My good uncle furnished the needful supplies with liberal but not with lavish hand. He wished us to enjoy every innocent and rational pleasure consistent with our situation in life, but desired that we might afford him satisfaction similar to that of John Gilpin in his "loving wife," when he was

"o'erjoy'd to find

That though on pleasure she was bent,
She had a frugal mind."

"Keep a regular account of your expenditure," said my uncle; "take care that you save enough to supply you liberally on the last day of your journey, and incur no expense that you would be ashamed to see in your account-book."

Frank carried out my uncle's advice to the very letter. Not a penny did he part with but he immediately made a regular entry. I fully intended to do the same, but sometimes suffered myself to let it go for a day or two, trusting to my memory to keep a careful register. Now, I am quite sure that I did not spend any money that I should have hesitated to appropriate in the very same manner in my uncle's presence; but so it was, there was one half-crown I never could make out. Whether I lost it from my pocket, or whether I forgot the article on which I had expended it, when,

after a suspension of entries for not more than two days, I attempted to balance my accounts, this said half-crown was not to be made out. It exceedingly vexed me; for I had pleased myself with the idea of showing my uncle a neat, correct, and accurate account, and receiving his approbation, which I highly valued. Now, if Frank showed his account and I did not show mine, uncle might think there was some entry which I wished to conceal. This would have been worse than the truth. If I showed it to him with, "Deficiency 2s. 6d.," he would justly say, "O Samuel, Samuel, you did not mind my maxim, every time you took money from your purse to take also your memorandum-book from your pocket, and "do it, that it might be done." This at last I resolved to do, and instead of receiving the unmingled approbation I had desired, to content myself with a lower position, and derive from my disappointment a lesson of wisdom for the future. Uncle, however, declined to look at our books; he was quite satisfied with the balance we brought home, and said the excursion was a little trial of character, in which he was pleased to find that we stood so well. But though I never had an opportunity of confessing my negligence to him I never forgot it myself. That half-crown deficiency, coupled with my uncle's admonition, in attention to which I had failed, have often recurred to my memory in riper years, and preserved me from giving way to a similar negligence in transactions not merely involving pence and shillings, but pounds and hundreds of pounds. I know the comfort and advantage of keeping a regular account. Poor Arthur carried his irregularity from little things to greater, and has consequently failed of success in all his undertakings, and been continually involved in difficulties against which a strictly regular account daily meeting his view would have formed no trifling preservative.

My uncle's knowledge of the law, as well as his established character for integrity and sound judgment, qualified him to give counsel and assistance in matters of property; and on many occasions his advice was sought by relatives and friends.

"I have been thinking, cousin Barnaby," said a widow relative of the family, "that it would be very proper for me to make a will."

"I think so too," said my uncle, "so do it, and it will be done."

"I do not know that there is any immediate hurry about it; my health is very good, and you know I am the youngest of the family." By family she meant a race of cousins, not brothers and sisters, for she had none.

"A will is better made in health than in sickness, when there is so much to attend to, and so little capability of attention; and the youngest of a family is not always the survivor."

"True, cousin; and I should not die sooner for having made my will."

"Certainly not; but you might live the more comfortably."

"It is but little I have to leave behind me."

"The fewer words will be required to describe it."

"Perhaps some day, cousin, when you are quite at leisure, you would draw up something of the kind for me to look over."

"I am sufficiently at leisure now to give you half an hour, which is more than enough for the purpose; let us set about and do it, and then it will be done. What is it you wish expressed?" My uncle sat down to his desk, folded a sheet of paper, and looked for instructions.

"You take me quite unawares, cousin; you are such a man for the despatch of business. Suppose we leave it for the present, and I will see you again in a few days."

"Well, you must please yourself; but life is uncertain, and for my part I think no time like the present. Is it that you have not made up your mind that you wish to delay?"

"No, cousin, not that; my mind is quite made up that my little property should go to cousin William and his family. He was a kind friend to me when my husband died; and to him I may say I am indebted for having any thing to leave. I am sure it is all due to them; besides, my father's nephew does not at all need it, and I am under no sort of obligation to him."

"True; yet, as he is a first cousin, and the nephew of your father, while cousin William is a more distant relative, I suppose the former would come in as heir-at-law, especially as your little property is in freeholds."

"Well, it is quite right to provide against that; so if you will just set it down, it will be a great satisfaction to me."

My uncle in a very few lines expressed the will of his relative as to the disposition of her property, (of course taking due care that it should be legally explicit,) and handed it over to her for approbation. She looked it over, and said, "It will do very well; it is exactly what I wish." My uncle then proceeded to ring the bell for some of the servants to witness the signature. "Stop," said the widow, "now it is written, there is no such great hurry about the signature. There are a few jewels, and my watch, which I should like to leave as keepsakes among the younger branches of the family. I will look over the things, and then it can be signed at any time."

"Please yourself," said my uncle, "but remember, a will is nothing till it is signed; my maxim is, 'Do it, and it will be done;' you have thought about it, and set about it, but you have not done it."

In less than a fortnight after this, my uncle was hastily sent for to see this relative, who was alarmingly ill, and expressed an earnest desire to see him. He lost no time in visiting her; but she was too far gone to be capable of communicating her wishes. It was doubtful whether she even recognized him. She shortly after expired. The will was found in her pocket, unsigned: and her little property, contrary to her express wish, passed from a worthy family to whom it would have been a seasonable and valuable acquisition, and to whom the testator was under real obligations, to a rich and niggardly old bachelor, whose riches were already a burden to him; but who, when this small addition came to him as heir-at-law, had not the generosity to relinquish it.

There was another widow in the family, a person in struggling circumstances, and with a large family. "I have little or nothing to leave," said she, "but I ought to make a will, that after my death my children may know what obligations lie on me, and what resources there are for meeting them."

"Yes, it would be very well to do so," replied a friend; "it might prevent future misunderstandings in the family, though it is to be hoped you will live many years yet, and be placed in much better circumstances than you are at present. Every day you have reason to hope matters will mend, and perhaps in the course of a year or two you will

have realized some property that will render it worth making a will."

"It is worth making a will," replied the widow, "whether I have any thing to leave for my family, or only to make provision for every one connected with me receiving their due. Mine has been a life of struggles, but by the blessing of God I hope to do justly to every one."

"Yes, I hope you will; but do not make yourself too anxious about it. I think you had better, for the present, defer making your will, or it will always be haunting you, and perhaps impair your health, and hasten the event which it contemplates. Come, let us talk on some other subject."

"No," replied the widow, "having had the thought presented to my mind, I will not suffer it to escape until it be accomplished. Before I eat or sleep I will do it that it may be done."

A few minutes' reference to a regular account enabled her at once to perceive and to express the true state of her affairs, and her wishes as to the disposal of any little remaining property.

She did it before she ate, and she ate her meal with a double relish; she did it before she slept, and she slept with additional tranquillity, from the consciousness that such a document was in existence. From time to time she had the happiness of crossing out some name from the list of those to whom she was under engagements; and she lived to make a will which contained no reference to any such engagement, and treated only of the disposition of actual property.

There is one most important class of duties to which my uncle's maxim is emphatically applicable. It is that of caring for the souls of others. I saw one whom I had regarded as a Christian brother on the verge of danger. I had heard nothing to his prejudice, but I frequently saw him come out of a public-house opposite my window. "Perhaps," thought I, "he has lawful business there; my suspicions may be groundless, and what right have I to interfere with his affairs?" Still there was a secret conviction in my mind that from love to his soul and regard to his consistency I ought to speak to him. Still this went on from day to day, while I resolved it should be done, and only deliberated on the most proper and delicate way of doing it. With how much greater promptness and alacrity do we discharge a pleasing duty than a trying

one? A week or two elapsed, and still my mind and conscience were burdened with a sense of neglected obligation. I could bear it no longer; I resolved immediately to go and speak to the party, and intimate my apprehensions respecting him. What was my consternation on finding that he was in prison, having, by the love of liquor, been tempted to defraud his employer, and forfeit his good conscience and good name! Who can tell, if I had but followed my uncle's maxim of promptitude and perseverance, and spoken kindly to him the very first time that my suspicions were awakened, but I might have been the means of reclaiming the wanderer when he had strayed but comparatively a little way?

A friend of mine had prepared a bed-chamber for a visitor, and had omitted to furnish it with a Bible. "I will remember it to-morrow," was her thought: "it is not necessary again to go to the top of the house to-night, and perhaps he has one in his trunk;" but the counter thought prevailed, "perhaps he has not; perhaps, too, if I neglect it to-night, I may forget it to-morrow; I will do it, and it will be done." She returned and placed a Bible on his table. With him a Bible was a new appendage to a bed-chamber. It excited his attention, invited his perusal, and was made the power of God unto his salvation. "Whatsoever thy hand findeth to do, do it with thy might" in every affair that is deserving of any attention; but above all, in those great affairs which relate to the eternal welfare of ourselves or others.

"Do it, and it will be done." With what solemn emphasis does this apply to the infinite concerns of a personal application to Christ for life and salvation! Intentions, purposes, and resolutions never saved a soul. The nearest step to the door of the ark, if short of an actual entrance, was short of preservation. The manslayer might perish within sight and reach of the gate of the city of refuge: and the youth who lacked one thing, unless he obtained it, perished for want of the one thing needful. How unspeakably important, then, is it immediately and decidedly to choose and secure an interest in that good part which shall never be taken away.

In conclusion, I will sum up a few of my uncle's arguments for enforcing his favourite maxim.

"Do it, and it will be secured against the possibility of being left undone."

"Do it while you have leisure, that it may be better done than if done in a hurry."

"Do it, that you may have time to review your work, and correct or improve it if required."

"Do it thoroughly, that you may not have the injury and disgrace of its being left half done."

"Do it yourself, that you may not be disappointed by trusting to others."

"Do it, that your mind may be relieved from the burden of neglected duty."

"Do it, that you may be ready to derive all the advantages resulting from having done it."

"Do it, that you may enjoy the satisfaction of having accomplished something worth the doing. The apostle Paul was no legalist, and yet the retrospection was very dear to him, of having fought a good fight, and finished his course, and kept the faith, 2 Tim. iv. 7. While no man was more ready than he to admit 'yet not I, but the grace of God which was in me'—'by the grace of God I am what I am,' it was matter of rejoicing to him that the grace bestowed upon him was not in vain, 1 Cor. xv. 10."

"Do it, that you may not have to mourn over lost opportunities that can never be recalled."

"Do it, that however small your abilities and opportunities, you may enjoy the honourable testimony, 'she has done what she could.'"

"Do it, in humble hope that the blessing of God may crown your feeble endeavours, and cause it to result in usefulness and honour far beyond your present calculations. 'Give all diligence that you may be found of him in peace,' 2 Pet. iii. 15. And be not weary in well-doing: for in due season ye shall reap if ye faint not, Gal. vi. 9."—C.

DO I LOVE CHRIST ?

A MEDITATION.

—Yes, the fact is incontrovertible, there can be no true piety without holy affection. For what is the first and great commandment? "Thou shalt love the Lord thy God with all thy heart, and mind, and soul, and strength." The pious in all ages have obeyed this command. David, so distinguished under the Old Testament dispensation for the fervour of his piety, and John, equally illustrious under the New Testament dispensation for the loveliness of his charac-

ter, were so from the influence of sanctified affection. But for this, such effects would never have appeared; but for this, "the sweet psalmist of Israel," and "the beloved disciple," had never been found in the ranks of the righteous.

Is my heart then the seat of this holy principle? Are my affections set on things above? Do I really love Christ? Here are inquiries of infinite importance; and it behoves me solemnly and faithfully to answer them. It is true that the eye is often the inlet of affection, and that I cannot gaze on the Saviour as that woman did, who washed his feet with her tears, and wiped them with the hair of her head. No! He does not thus address me through the organ of vision. I might, like Augustine, desire to see Christ in the flesh; but I should desire it in vain. There is a veil which can neither be removed nor drawn aside, which effectually conceals him from all the dwellers upon earth.

And, thanks be to God, to behold him with the bodily eye, is not necessary, either to safety or to happiness. Objects excite emotion not merely from their being beheld, but from the degree of personal interest they awaken and sustain. Had a captive immured in a dungeon, heard of Howard, when performing his "circumnavigation of charity," even he, yielding to the ordinary impulses of humanity, would have had his affection excited to that distinguished philanthropist; just as, in later days, the heart of many a West Indian negro has thrilled with regard as he has heard of the devoted labours of Wilberforce.

It is possible, indeed, for an individual to be seen every day without exciting the slightest interest, while another may be the object of warm regard, though separated by the diameter of the globe. Henry Martyn, the missionary to Persia, never saw that apostle of the American Indians, David Brainerd, yet in his journal, he says, "How I feel my heart knit to that good man! I rejoice in the thought of meeting him in heaven." And thousands who never saw Henry Martyn, have felt their affections kindled for him as they have mused on his sacrifices for Christ, his devoted labours, and his death in a land of strangers,—strangers to himself, and what was far more painful, strangers to his God. Nor should it be forgotten, that it is not the countenance of the individual, however interesting, nor the various members however sym-

metrical, that we really love; it is the immaterial principle, the soul within: this present, lights up that countenance, and gives to the frame all its activity and power; and this absent, leaves it a cold and senseless clod. As I look around my domestic circle, I behold many whom I love, but in every instance, my regard is directed to what is unseen in them.

And hence I may be included among those whom Peter addressed when he said, "Jesus Christ, whom having not seen, ye love." For there is a striking analogy between one of the instruments of science, and an essential principle of Christianity. The man who merely looks on one part of the azure firmament, may see nothing to fix his gaze, yet even there the astronomer discovers by his telescope an orb of surpassing beauty and splendour. And so the individual who is under the power of unbelief, beholds not Christ, while to another he appears in his beauty and glory, because he directs to him the eye of faith. Here is, indeed, an exalted privilege. Jesus, appealing to Thomas, said, "Because thou hast seen me, thou hast believed; blessed are they that have not seen, and yet have believed." Faith, which is the gift of God, renders Jesus visible.

Once more then the question returns, Have I received the gospel testimony? Am I a partaker of the "faith that works by love?" Do I hate sin? If so I love Christ; for he came to redeem us from all iniquity. Do I resist Satan? If so, I love Christ; for he "was manifested that he might destroy the works of the devil." Do I aim at holiness of heart and life? If so, I love Christ; for "he gave himself for us, that he might sanctify to himself a peculiar people, zealous of good works." Or to put the question in another way, Do I love the Bible? If so, I love Christ; for that is his word. Do I love the Sabbath? If so, I love Christ; for that is his day. Do I love the sanctuary? If so, I love Christ; for that is his house. Do I love all the faithful ministers of the gospel? If so, I love Christ; for they are his ambassadors. Do I love all who receive their testimony on the ground of their doing so, and not from their joining my party and bearing my name? If so, I love Christ; for they are "members of his body, of his flesh, and of his bones."

And now to this direct appeal, what is the reply? Is it the affirmative, uttered with humility and gratitude? It is well;

well for time, well for eternity. Or is it, "I fear to speak confidently, yet this I can say, sincerely and earnestly do I desire it all." Then let me remember that in the vocabulary of the Christian church, desire—spiritual, heart-felt desire, is but another name for love to the Saviour, and is as certainly the result of Divine operation, as the light which first scattered the darkness, or the spring-tide warmth which diffuses beauty, fertility, and gladness over the face of the earth.

W.

PERSIAN MULETEERS.

WE now cast our eyes over—I will not say enjoyed, according to the customary phrase—one of the withering and hopeless looking prospects of endless mountains of snow that ever greeted the inflamed optics of miserable travellers; it seemed as if, in truth, the morning sun coming forth could "wake no eye to life in that wild solitude;" and on these altitudes we continued, plunging down one side of a peak to mount up another, thus making our way along the crest of the ridge for several hours, with a continuation of effort quite exhausting, until our alpine *traject* terminated in one of the steepest and longest descents I ever made. I am certain we came sheer down an uninterrupted mountain-side of full three thousand feet in height, upon a little hollow, rather than a valley, of unbroken snow, in which lay a village, like a black-winged bat sleeping in a nest of eider-down. It was one of the severest things I ever had to do. There was no riding; my saddle came twice over the horse's neck in the attempt, and then I gave it up. It was just one long slipping and scrambling-match the whole way down; and I got half-a-dozen severe tumbles to help my poor wrenched back, by the heels of my clumsy boots sliding from under me on the old frozen snow.

We stopped awhile to put ourselves to rights and take breath, at the bottom; and often as I have had occasion to admire the courage of Persian muleteers, I never did so more than at this moment, when, still panting with the exertion of merely descending, I looked back, and measuring the height from which we had stooped, reflected what the first ascent must have been. The caravan which opened this track had come from Khoee, and when they reached this little valley, and observed the state of the snow,

knowing that the defile must be impassable, had taken the bold resolution of breasting up this precipitous acclivity, which, even when free from snow, would be considered as a desperate attempt. What, then, must the performance of it have been when the embarrassed animals had to flounder upwards, shoulder-deep in tough snow? when not a moment could pass without loads falling and going wrong; horses and mules tumbling into holes, sinking, giving up, and all the other exciting occurrences incident to such a struggle against difficulties that are often insurmountable even in the plain? Verily, these rough, hardy muleteers merit a crown of honour for their perseverance, and a place for indefatigable courage beside the bold Soorajees of Turkey.

Perhaps there cannot be a more interesting and exciting spectacle than the progress of a large caravan of mules and yaboos, conducted through the unbroken snow of a stage that has been shut up by drift or a heavy fall, by these Persian muleteers; and the behaviour of their animals is as gallant, as striking, as their own. A large and powerful unloaded mule is generally chosen to lead on such occasions; and the animal, caparisoned in handsome harness, with bells and fringes, seems conscious of the trust that is reposed in, and the exertions that are expected from him. Far from being dismayed at the laborious exertions that await him, he is ready to fight for the post of honour, and kicks and bites at any of the rest that attempt to pass him, or to share his toils: with a sagacity that is wonderful, he smells out as it were the obliterated track, or searches for a fresh one in the most promising ground. Through the deep but even snow he plunges with unfaltering perseverance, listening occasionally to the shouts or directions of his master, until, quite done up, he is withdrawn to be replaced by a fresh leader. Does a wreath occur, he smells about for awhile to discover the soundest and shallowest part, then boldly dashes at it with his full force, and never halts until he flounders through or gets so deeply entangled as to require help to effect his extrication. If the snow is very deep, there must be many such leaders put forward in front, for the track of one is not sufficient to open up a passage for the loaded beasts; and truly it is a fine thing to see these bold sagacious brutes

performing the duty which they know falls to their share. The loaded animals follow with more caution, but their sagacity is scarcely less admirable. If they fall or stick, there is a momentary flounder, and a strong effort to get free; but if this fails, they know as well as if they were endowed with reason, that they are powerless without the aid of men, so they lie quite composed in the snow till that aid comes; and then, to be sure, the practised manner in which they assist these efforts is wonderful. Then for the men; to see these hardy fellows, in their heavy felt-coats or sheepskins, plunging after their beasts, now dashing forward to help the leaders through a bad step, in another moment loosing the load of a fallen mule, covered with snow; often forced to carry the packages themselves for a considerable way, their mules now and then rolling head over heels down the hill-side, and landing in the ravine below, themselves working on breast deep ahead with their long staves, to sound the depth of suspicious places. Then the shouting, and the whinnying, and the braying, and the ringing of bells, and the shrieks or cries of the passengers, who may be pent up in kajawahs or baskets on either side a mule, form altogether a scene of interest and excitement which it is not easy to forget.—*Frazer.*

ON WORLDLY AMUSEMENTS.

WITH regard to the theatre, and amusements of this kind, Christians must have little to do if they can find time for them. But if they could find time, I confess I am at a loss to see what business they can find there. Are not the sentiments usually uttered in such places quite in opposition to the precepts of God's word? Are not pride, vain-glory, self-destruction, hatred, dissipation, unlawful attachments, held up to our admiration in many theatrical compositions, considered as trivial faults in most of them, and detested upon right principles, in none? You profess, as a Christian, to make Jesus your happiness. What can you find here to bring you into communion with him? You profess to make his glory your aim. Can you then sit with complacency, and hear a company of your fellow-creatures with immortal souls uttering sentiments which only tend to make them despise Christ and his ways? —*M. J. Graham.*

STRUCTURE OF SHELLS.—No. IV.

The forms of the cone, fig. 1, and olive-



shell, fig. 2, are such as to allow but a



small space for the convolutions of the body of the animal, which consequently becomes exceedingly cramped in the progress of its enlargement. What then would be the expedient of human wisdom? One, doubtless, infinitely inferior to that adopted. In order to obtain more space, and at the same time to lighten the shell, the whole of the two outer layers of the inner whorls of the shell are removed, leaving only the interior layer, which is therefore very thin when compared with the other whorl, that envelopes the whole, and which retaining its original thickness, is of sufficient strength to give full protection to the animal. That this change has actually been effected, may be seen distinctly in the cone, fig. 3. Fig. 4, is a



transverse section of a shell of this kind, showing the spiral convolutions and the comparative thinness of the inner portions.

Instances indeed occur among shells of the total removal of the interior whorls. This is the case with the genus *Auricula*, which are molluscous animals, respiring by means of pulmonary organs. In the young shell of this tribe, the partitions which separate the cavities of the whorls are incomplete, and twine parallel to each other; but they wholly disappear as the animal approaches maturity. In other cases, the animal removes exterior portions of shell formerly deposited, when they are in the way of its farther growth, and when the mouth of the spire is advancing over the irregular surface of the preceding whorls. In other instances, no such power of destroying portions of shell previously deposited appears to exist; and each successive whorl is moulded on the one which it covers.

It has long indeed been a prevailing opinion among naturalists, that no portion of a shell which has been once deposited and has become consolidated, can be altered by the power of the animal which formed it. It appears, however, that on some occasions the creature removes large portions of its shell, when they produce inconvenience; but these cases must be regarded as exceptions to the general rule. The connexion between the animal and the shell is mechanical rather than vital; and the shell itself must be considered as an extraneous body, forming no part of the living system. Whatever share of vitality was possessed at the time of its deposition, all trace of that property is soon lost. Thus the holes made in shells by parasitic worms are never filled up, nor even the apertures of the cavities so made covered over, unless the living flesh of the animal be wounded. In this instance calcareous matter exudes and a pearly deposit is produced. The worn edges of shells and their fractures are never repaired, except so far as they can be by the addition of materials from the secreting surfaces of the mantle. Still it were erroneous to suppose that there is no closer connexion between the shell and its inmate, than between the mason and the house he has built. On the contrary, the connexion between them is inseparable during life, but it is made merely through the medium of muscles which go from the animal to be inserted in the

parietes or walls of its dwelling. The mollusca of bivalved shells are thus attached by one or two large and powerful muscles; sometimes called transverse, because, passing through the body, they are inserted into both valves at opposite points; and sometimes adductions, because their office is to close the valves and keep them shut; and the astonishing force with which they act is felt whenever there is extreme difficulty in opening those of an oyster.

In some univalves, as the limpet, the body is fastened to the circumference of the shell by a ring of fibres, which are attached all round the shell, and which, after piercing the outward covering or cloak, are inserted in the edges of the foot, and interlaced with its circular fibres. This muscle, by its contractions, brings the foot and the shell closer together, and compresses the body; on relaxing, it allows the shell to be raised by the elasticity of the body. The snails of spiral shells are bound to them by two muscles, which arise from the pillar; and, having penetrated the body below its spiral part, run forward under the stomach, and spread their fibres in several slips, which interlace with those of the muscles proper to the foot, the substance of which they enter.

A limit has been assigned to the growth of shells, and of their inhabitants; and at a certain period considerable changes take place in the disposition of the mantle, and in its powers of secretion. Frequently it suddenly expands into a broad surface, and adds to the shell what may be termed a large lip. No sooner is this accomplished than sometimes the same part again shrinks, and the mantle retires a little way within the shell, still continuing to deposit calcareous layers, which give greater thickness to the adjacent part of the shell, and at the same time narrow its aperture, and materially alter its general aspect and shape. Thus it happens that the shells of the young and of the old individuals of the same species are very different, and would not even be recognised as belonging to the same tribe of Mollusca. When the animal which inhabits a spiral shell retires within it, the only part of its body exposed to injury is that which is situated at the mouth of its dwelling. But the Creator has not designed that it should be without defence. In order to its protection it is, in many instances, prepared to construct a separate plate of shell, adapted to the

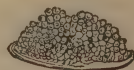
aperture, and called an operculum. This engraving exhibits the lines which appear on



the inner side of that of the Turbo, and which show the successive deposits by which it has been formed.

A clausium is another kind of covering, and consisting of a thin spiral plate of shell attached to the columella by an elastic spring, by which the plate is retracted when the animal retires into its shell. It thus exactly corresponds with a door, opening and closing the entrance as occasion requires.

An epiphragma is a partition made merely for temporary use. On the approach of winter, the helia, or garden snail, prepares itself for passing that season in a torpid state, choosing a safe retreat, retiring completely within its shell, and then forming the defence just described, of which the following engraving



is a representation of its outer surface.

Nor is this all; for when this first barrier is formed, it afterwards constructs a second of a membranous nature, placed more within and at a little distance from the first. If, too, at any other season, while the snail is in full vigour, it be surrounded, for the sake of experiment, with a freezing mixture, it will immediately set about constructing a covering for its protection from cold; and with such diligence does it work, that in the course of an hour or two, it will have finished its task, and a complete epiphragma will be formed. On the genial warmth of spring penetrating its abode, the snail prepares to emerge from its prison, by secreting a small quantity of a mucous fluid, which loosens the adhesion, and the defence is thrown off by the pressure of its foot. On every occasion when another covering is required, this process of construction has to be renewed. By means of it snails and other creatures may be preserved for months and even years in a torpid but living state, ready to be restored to its most active functions when sufficient water is applied.

EDWARD VI.

(Continued from page 290.)

IN the year 1552, additional measures for carrying forward the Reformation were sanctioned by authority. The excellent catechism afterwards enlarged and set forth as Nowell's Catechism, was now first published and sanctioned by authority. But Northumberland was evidently an irreligious character. He engaged the king in the habitual violation of the Lord's day, by fixing that the arrears of public business should be attended to by the council on that day. Edward appears to have consented with reluctance, and wrote with his own hand a condition, that the counsellors should first be present at the public services of religion. In the summer, the king went a progress with much state, as far west as Salisbury.

The general improvement of principle during this reign, may be traced with regard to many subjects of general polity. An act passed respecting treason, which required the open testimony of two witnesses, confronted with the accused, instead of the practice of passing bills of attainder on written evidence only. The attention already shown by the young king to the interests of his subjects, appeared in the sanction given to commercial enterprise. An end was put to the monopoly of foreign trade by the Easterling or German merchants, the body often designated merchants of the Steel-yard. Still the infant state of commerce seemed to need the combinations of individuals. Another company of English merchants, called the Merchant Adventurers, was encouraged. In seeking after a north-east passage to China, they opened a valuable trade with Russia, then only accessible through the northern port of Archangel.

The duke of Northumberland was unpopular; the feeling against him was increased by his interference with the elections to a new parliament, and by his requiring a considerable amount in taxes. The worst state measure of this period was debasing the coin, which aggravated the popular discontent by making a general rise of prices, while it answered no end, not even in diminishing the amount of the king's debts, which were principally owing to foreigners who could not be brought to receive payment in this debased coin. Amidst all the popular discontent, Northumberland took care to increase his own resources, ob-

taining, among other grants the temporal revenues of the see of Durham.

The attention of the nation at large, was now drawn to a most important subject, the alarming state of the king's health. Edward's constitution never had been strong, and his early accession to the cares and splendour of royalty could not but be injurious. In April, 1552, he was attacked by the measles and the small-pox; which still further weakened him. At Christmas, the festivities of that season were celebrated by the court with all the show and indulgence usual during the late reign, but which had been laid aside for some years on account of the king's youth. The excitement and unusual indulgences brought forward consumptive symptoms; a cough came on; the manifestations of diseased lungs were apparent. A fatal result was generally apprehended, though there were at times the favourable changes incident to this flattering disease. Northumberland felt the instability of his present position, and he thought to make himself secure by boldly grasping at still higher power. His first measure was to form alliances between his family and others of the first rank: one between lady Jane Grey and his fourth son lord Guildford Dudley, another between his daughter Catherine and lord Hastings, and a third between Catherine, the sister of Lady Jane Grey, and the heir of the earl of Pembroke. These marriages were celebrated with much pomp about the middle of May, 1553.

In the next month, Northumberland began to carry into effect his further designs. By working upon the king's fears as to the fatal results to the nation, especially to the Reformation, if his sister Mary should succeed to the throne, he prevailed upon Edward to set aside both his sisters, and to promote the succession to the throne of the lady Jane Grey, who, upon her mother's relinquishing her own claim, was next to them. The council feeling themselves committed to follow Northumberland, agreed to the plan and furthered it. Cranmer alone steadily opposed this proceeding. Some of the judges being consulted, declared that such a course would be treasonable. They were commanded to prepare an instrument directing such a change in the succession, for the royal signature, but did not comply till after several interviews with the king and council, and having a pardon granted them under

the great seal, for preparing such a document.

On June 21, this instrument was completed by the signature of the king and more than thirty of the principal nobility and judges; among them was Cranmer. The archbishop declared afterwards, that if he could by any act of his doing have prevented such a measure, he would have so done, and that he only consented to affix his name at the especial command of the king. Judge Hales, a decided protestant, continued steadfastly to refuse to sign the instrument. It is evident that Northumberland, alone, had not influence or power to effect such a change as was here contemplated. It was the result of a combination of the leading families of the nobility, assisted by the anxious feelings of the king. It was another effort of the aristocracy to regain the power that body had exercised during the preceding centuries. The youthful lady Jane and her husband would have been mere puppets at their disposal, succeeding on a defective title, instead of the bigoted and resolute Mary, already prepared to admit foreign influence. It is important to notice the refusal of Cranmer to sanction the measure: it clearly shows that the plan did not arise from the chief supporters of the Reformation, though the idea of strengthening the protestant religion, might act upon the mind of Edward himself, weakened by disease, probably unable or unwilling to consider the direful effects likely to result to the nation from a disputed succession to the throne. The king was now sinking rapidly; but a few days later he gave legal sanction to a plan formed a few months before, when bishop Ridley preached before him and said much on the duties of charity and liberality. After the sermon, the king sent for Ridley, and requested that as he had shown what was his duty, he would now say in what manner he should perform it. The bishop was much affected, and asked leave to consult with the mayor and aldermen of London, on the best method of relieving the poor. In a few days, he returned with a plan, dividing the poor into three classes; those who were not in their right minds; the sick and destitute; and the wilfully idle and depraved. The king ordered the Grey Friars monastery and the lands belonging to it to be endowed as a school, now Christ's hospital; Bride-well and Bethlehem were established for

idle, dissolute characters, and for the insane; and St. Bartholomew's hospital for the reception of sick and maimed persons. A provision was also made for the relief of poor housekeepers. Edward hastened the appropriation of these endowments: on signing the charters on June 26, 1553, when he was so weak as scarcely to be able to hold his pen, he thanked God for sparing his life till he had executed this design. All these excellent institutions have continued till the present time, and are noble monuments of protestant proceedings.

The physicians having declared their utter inability to stop the king's disease, a female empiric was allowed to prescribe. Her remedies were injurious, or, at any rate, the king continued to grow worse. A report of amendment was circulated, but the precautions required by a probable change were acted upon. On July 6, 1553, Edward VI. expired. A few hours before his death, thinking himself alone, he uttered an earnest prayer, which his physician, Dr. Owen, and four other attendants heard, and noted down, "O Lord God, free me, I beseech thee, out of this miserable and wretched life. Receive me among the number of thine elect, if so it be thy pleasure. Although not mine, but thy will be done. To thee, O Lord, I commend my spirit. Thou knowest how happy I shall be if I may live with thee in heaven. Yet I would I might live, and be well, for thine elect's sake, that I might faithfully serve thee. O Lord God, bless thy people, and save thine inheritance. O save thy people of England; defend this kingdom from papistry, and preserve thy true religion in it, that I and my people may bless thy most holy name, through thy Son Jesus Christ." Opening his eyes, he saw his physician, and said, "Are you there? I had not thought you had been so near. I was making my prayer to God." A silence ensued; when saying, "I am faint—Lord, have mercy on me! receive my soul," he suddenly expired. An effort was made to conceal the melancholy event; but the rumour soon spread, though without authority: thus the public mind was for some time agitated between doubt and denial.

There is no occasion to enlarge upon the character of this pious and estimable young prince. The few instances of proceedings which must be considered as blots upon his character,

were occasioned by undue influence, working even on the best traits of a youthful mind. We need not conjecture whether his moral firmness would have increased had he advanced in years: it is enough for us to be sure that the portion of work allotted him was performed, when his Lord and Master thus permitted him to retire to rest. And it was an important work. The brightness of the spiritual light diffused under his sway, contrasted fully with the darkness of his sister Mary's acts; they left a foundation too firm for her to root out, which supplied a platform for the superstructure Elizabeth was permitted to rear. We must not forget that the Reformation, as settled in Edward's days, is in fact the Protestantism of our land.

The pursuits of this amiable monarch were not inconsistent with his religious principles. He cultivated literature, and studied matters connected with general polity, and the government committed to him. The journal of events, during his reign, kept by himself, exhibits his pursuits and recreations; he took part in many exercises, though his general health and strength did not permit him to excel therein. He took pleasure in filling his part as king on public occasions, but never allowed himself to be diverted thereby from the due improvement of time.

Such was the fair promise of a youthful monarch, trained in the fear of God and regard for his holy word. We have seen the reverence for the Bible manifested at his coronation. An interesting anecdote of his childhood shows how deeply he was imbued with this reverence. One day, when very young, he wished while at play to get something that was above his reach: a companion observing this, brought a large book for him to stand upon; but Edward perceiving that it was the Bible, rebuked his associate for his want of respect to the Scriptures; and lifting the book reverently from the ground, he kissed it and replaced it on the shelf.

It is useless to speculate what Edward might have been in after years. It is enough to turn to the list of English monarchs trained in the ways of the world, and after the customs of their day. Comparing them with our sixth Edward, who was brought up in the nurture and admonition of the Lord, we may fairly ask, who gave the best promise of being a nursing father to his people in

advanced life, had God seen fit to allow him a longer continuance on earth?

LADY JANE GREY.

LADY JANE GREY was the daughter of Charles Brandon, the duke of Suffolk, who married the sister of Henry viii. Her mother was still living, so that any claim to the throne rested in her rather than her daughter; but, as the accession of the mother would not have met the views of Northumberland and the other nobles, they prevailed upon her to relinquish in her daughter's favour any rights she might be supposed to have. Lady Jane was a pleasing and highly accomplished female. Brought up in the severe family discipline usual at this period, she had found her chief pleasures in books and literary pursuits. Under the tuition of Aylmer, afterwards bishop of London, she thoroughly learned the Latin and Greek languages; she also studied Hebrew, and was acquainted with French and Italian. Her marriage with lord Guildford Dudley has been noticed; this union was evidently connected with Northumberland's desire to obtain the crown for his family, and the whole, as Turner ably shows, was the result of a union or conspiracy amongst the principal nobles to exalt their own power.

The death of Edward vi. took place on July 6, 1553, in the evening. The first objects of Northumberland and his confederates were, to get the princess Mary into their power, and to make the preparations necessary to enable them to support the queen they were about to place upon the throne. These preparations had already been commenced: the Tower was under their command; a fleet in the Thames was ready to obey their orders; regulations for levying forces had been already made. Mary was come to Hoddesdon, near London, in consequence of a message desiring her to attend the dying king; there private information was sent her of her brother's decease and the proceedings of the lords, probably by lord Arundel, one of the council. With prompt decision she took horse that night, and hastened to her house at Kenninghall in Norfolk, sending to several of her friends to meet her there. Meanwhile the council prepared for the public announcement of queen Jane. A few days before the decease of Edward, the duchess of Northumberland had intimated to her that she was to be queen in case of his death. She was

disturbed by this intelligence, and returned home, from whence upon the death of Edward she was again conducted to the residence of Northumberland, where the chief nobility waited upon her; they rendered solemn homage, and stated her appointment to the throne to the exclusion of the two princesses.

Lady Jane was, as she affirmed in a letter to Mary, overcome with the intelligence, and burst into tears, declaring her inability to be queen. Of course the nobles urged her to accept the crown; after a short pause, she acceded to their wishes. As Turner expresses it, "The crown was offered—she was urged—she was astonished—and she consented." The next day queen Jane ("the twelfth night queen," as she was emphatically termed, for her reign lasted no longer) proceeded in state to the Tower, with a cortège of mighty lords and noble dames. The crown was brought forward, with an intimation that another should be prepared for her husband. From her letter already mentioned, it is clear that she was early made acquainted with the thorns which beset a crown. A quarrel between Jane and her husband immediately ensued. Having consented to accept the crown which rightfully belonged to another, she was not pleased to hear that a second, though her own husband, was to partake of the royal dignity. She first intimated that he must wait till she caused an act of parliament to be passed raising him to the honour; on further thoughts, she declared she would make him a duke, but not king. The angry youth and his enraged mother showed their resentment; poor Jane was disposed to continue obstinate, and thus early tasted the bitterness which will ever result from appropriating the possessions of another. While the noble family were thus engaged, the council were involved in increasing difficulties.

On July 10, Jane was proclaimed queen: the people assembled in crowds, but very few applauses were heard. Her supporters, however, possessed the command of the metropolis and all the resources of the government. They had failed in securing the princess Mary; but she had fled almost unaccompanied to a distance, while their own followers were numerous: their fleet also had sailed to the coast of Norfolk, to intercept Mary's retreat to the continent.

Mary was active. Her retreat to

Kenninghall was made known, with a summons to her well-wishers to resort thither. On the 9th, she sent a letter to the council, requiring them to proclaim her as queen. They sent her in reply a requisition to submit to queen Jane. The gentry of Norfolk and Suffolk hastened to support Mary. Sir Edward Hastings, who had been sent by Northumberland to gather forces against her in Buckinghamshire, assured her of his good will. Thus supported, she proceeded to Framlingham Castle, a more favourable position. From 20,000 to 30,000 of the gentry and their followers assembled, bringing abundance of supplies. Mary was proclaimed queen at Norwich; the crews of the ships sent forth by the council were informed at Yarmouth of the general disposition in her favour, and themselves expressed the like sentiments.

The council were informed on the 12th, that many were flocking to Mary. On that day they resolved that the duke of Suffolk should go and bring her prisoner to the Tower. Jane was unwilling to part with her father. His absence would leave her unsupported among the Northumberland family. That duke being requested to take the command, he consented. Part of his forces marched on the 13th, he followed on the 14th with the remainder. The people assembled, but as Northumberland remarked to lord Grey, "Not onesaith, Godspeed us." The council still supported their usurping queen: letters announcing her accession were sent to the English ambassadors abroad, while orders were forwarded to the estates of the principal nobles, commanding their retainers and tenantry to hasten to the support of queen Jane. Many of them, however, were already in motion for Mary; on the 15th, Sir Edward Hastings began to advance towards London with a large force in her favour.

The hearts of the people had not favoured the change in the order of succession. Even the Protestants hastened to support Mary, who did not hesitate to promise full security as to their religion. Before Northumberland reached Bury, his supporters were few and wavering, while Mary's followers advanced in great numbers. He found it necessary to fall back to Cambridge: from that moment it was evident that the conspiracy against Mary had failed. The nobles who remained in London, by

this time found that it was useless to oppose the national feeling. Some of their number retired from the metropolis, among them the marquis of Winchester, who had been the most violent against Mary. On the 19th, they called some who were friendly to her in the metropolis to a conference. Lord Arundel, one of the council, recommended them to submit, mentioning the favourable answer respecting religion which Mary had given to the men of Suffolk. Hopeless of success, they ordered that Mary should be proclaimed queen; which the people applauded, showing their satisfaction by bonfires and public rejoicings. The council wrote the same night a letter to Mary declaring their submission, while Arundel and Paget hastened to her with the great seal. The duke of Northumberland acquiesced in this course, and proclaimed Mary at Cambridge; but his troops proceeded further: they arrested Northumberland with others of their leaders.

The duke of Suffolk was sent to inform his daughter that her brief pageant of royalty was over. She certainly showed better feelings under this shock of adversity, than she had done when the honour came upon her. Her words to her father were: "I better brook this message than my former advancement to royalty; out of obedience to you and my mother I have grievously sinned, and offered violence to myself. Now I do willingly, and as obeying the motions of my soul, relinquish the crown, and endeavour to salve those faults committed by others, if at least so great a fault can be salved, by a willing relinquishment and ingenuous acknowledgment of them."

When we consider the family disputes and many disquietudes, which beset her "twelfth night" reign, we may well believe that Jane was sincere in the sentiments she expressed. Her bodily health had been discomposed and affected during this short period, so as to make it appear as though some one had given her poison. She declared this in her letter to queen Mary: there could be no foundation for such a supposition; but it forcibly shows how unsatisfying are all earthly honours. Thus ended the reign of queen Jane; one of her attendants left her at noon, sent to be present at a christening as proxy for her royal mistress: on her return in the evening, without having heard of any

change, she found all the ensigns of royalty removed, and that she was the attendant of one liable every moment to be charged with high treason. On the following morning Jane retired to Sion house, a country seat of her husband's family.

We may again remark, that this attempt to set aside the rightful heir must not be charged upon the Reformation, or its leading supporters. Anxiety to avert the direful result likely to ensue from the bigotry of Mary, might influence the mind of Edward, weakened by disease, to consent to the project of the nobles to make the aristocracy of the land its rulers; but it is plain that their views were not influenced by religion. On the other hand, the Protestant gentry and commonalty, by coming promptly forward in support of Mary, showed their desire to "render to Cesar the things which are Cesar's," even with considerable cause to fear that Mary would not "render to God the things that are God's." Several of the council who supported Jane were found among the most active papists in the following reign, while Northumberland himself was notoriously a man of no religion. When on the scaffold in the following month, he reviled the Reformation, and declared himself a papist. To this bold bad man and his family the words of Zophar seem applicable, "He shall fly away as a dream, and shall not be found. Yea, he shall be chased away as a vision of the night." The whole of the description in the passage may not be applicable; but the concluding verses are so. "The increase of his house shall depart, and his goods shall flow away in the day of his wrath. This is the portion of a wicked man from God, and the heritage appointed unto him by God." See Job xx.

STATE OF THE GENTILES.

THE distinction between parts of the human race as to the relation which they severally maintained to God, is as old as the earliest records. In Gen. vi. 2, we find this distinction recognised in the appellations, sons of God, and daughters of men; denoting that there were some individuals, who, on account of their professed and manifested obedience to the

laws of God as their father, were entitled to be called the sons of God ; and others, who, on account of the very opposite character they sustained, were justly styled the offspring of men. At a subsequent period of history, when the confusion of tongues had separated the families of mankind in different directions, this distinction became more marked. The original light which shone in perfect lustre in the minds of our first parents, and instructed them on all points of necessary knowledge of their Maker and themselves, was obscured by their fall from rectitude. It became dimmer and dimmer in proportion to the length of time through which it flowed, and could scarcely maintain its existence in the thick atmosphere of moral turpitude by which the spread of iniquity environed it. In one chosen family, that of Shem, was it preserved and increased by occasional and express revelations from God ; but when by the division of nations, and the diversity of languages, that family had no longer an immediate influence on the other branches of the human race, the latter, left to the flickering and uncertain light, afterwards dignified by the title of the light of nature, lost all right conceptions of the character of God, and with that all consciousness of their duty and their state.

In process of time, one of the most illustrious descendants of Shem was singled out from his family, and removed from his country, that his posterity might become a visible testimony to the true principles of religion. That people, after a series of migrations, afflictions, and captivity, were at length fixed in the possession of the land of Canaan, and distinguished from the rest of mankind by a code of religious laws, and a ritual of ceremonial observances, of a kind totally distinct from those which were possessed by the other nations of the earth. The most observable feature in this revelation was its clear assertion of the oneness and simplicity of the Godhead, and of those duties which rational and accountable beings owe to that one God, and to each other, in consequence of their common descent from him, and mutual relationship. Another feature, not less characteristic of this system, was the subordination of all its symbols and ceremonies to the elucidation of one great principle in the economy of salvation, namely, the pardon of sin through the offering of an atonement to God. Towards this point as the

centre of the whole circle of Judaism, every radius tended : to this doctrine the types, the sacrifices, the temple, yea, the whole body of Judaism, gave a perpetual testimony. This was what rendered intelligible the otherwise inscrutable hieroglyphics of the ceremonial law : this alone could render the moral law consistent with the hopes of sinners. Nor was it the intention of this system merely to advert to the abstract truth of such a means of salvation as alone consisted with the perfections of God, but it also contained a body of testimonies sufficient to identify the person of the future Saviour ; and by a combination of natural types, and the living and oft-repeated voice of prophecy, it announced to the minds of the expectants all the circumstances of his life, death, and successful work for men. These were the privileges of this chosen portion of the family of Shem ; and from their contemplation of the great difference between themselves and others, in the relation in which they severally stood towards God, they called the other nations of the earth by a name which we have translated Gentiles.

I have already asserted that at a very early period these nations, unblessed with the counteracting influence of revelation, fell into gross ignorance. That ignorance became more and more profound, as it was acted upon by sensuality, and manifested itself in very early periods of patriarchal history in an entire forgetfulness of the spirituality of God. The existence of God was a fact unquestioned ; but they had lost, by the wilful indulgence of a depraved appetite, all perception of and communion with him : the necessity of a reverential worship of some superior being was forced on their convictions by a sensible experience of their own weakness, and their consequent dependence for existence and preservation, on some powerful and benevolent being. They looked around them, they looked above, they were forcibly struck by the beauty and splendour of the heavenly bodies, the harmony of their movements, the influence which they had on universal nature, and, above all, by the benefit which their light had conferred on them in their painful and dangerous migrations from the plains of Shinar to their distant abodes ; and, paying to the creature the debt of gratitude they owed to the Creator, they soon fell into the first and most widely spread avowed deviation from the worship of the

one true God, called originally, Sabaism, or the worship of the planetary system.

To the existence of this system of worship all antiquity testifies; yea, even in later periods, when the complicated mythology of Egypt, Greece, and Rome had multiplied deities to an almost incredible extent, and portioned out the whole universe into innumerable sections, each possessing its distinct and local god, the worship of the sun, moon, and stars was never superseded. In our own country, and even in these days, we have a relic of this worship in the application of the name of the sun, moon, and the other planets, in the original language of our ancestors the Saxons, to the seven different days of the week, days originally consecrated to the worship of these supposed deities. The patriarch Job has left us an undoubted testimony to the prevalence of this system of worship in chap. xxxi., verses 26, 27, 28: "If I beheld the sun when it shined, or the moon walking in brightness; and my heart hath been secretly enticed, or my mouth hath kissed my hand: this also were an iniquity to be punished by the judge: for I should have denied the God that is above." I need scarcely inform you that the kissing of the hand was an ancient symbol of religious adoration, a symbol to which the psalmist refers in his exhortation, "Kiss the Son, lest he be angry;" and that the conduct here alluded to by the patriarch is to be restricted to a purely religious ceremony, is attested by his reflection, "this were an iniquity to be punished by the judge: for I should have denied the God that is above."

False worship, however, though it began in the adoration of the planets, did not confine itself to them. By an easy and, indeed, a necessary transition, whatever was remarkable in nature for the singular beauty of its appearance, whatever possessed the power of elevating the mind to sublime conceptions, was invested first with the robe of mystery, and then worshipped as a god. The sea, the earth, the air, the mighty torrent, the fountain secluded from ordinary observation by precipitous rocks, the impervious forest, all excited ideas of grandeur; and, acting on minds framed with the keenest susceptibility to sublime impressions, but destitute of the knowledge of him who is alone their adequate object, and throbbing with feverish pulsation for the attainment of some end commensu-

rate with the energies and capabilities they possessed, were enthroned as deities: "They became vain in their imagination, and their foolish heart was darkened." Poetry, music, and statuary lent their aid, and the witchery of these arts completed the delusion by a palpable representation of the mysterious object to the ear and eye. The apostasy was now appalling. The statues of ancestors and benefactors, carved originally, perhaps, only to perpetuate the revered features of those who were lost, soon became objects of veneration; what was to those who had known the original but a remembrancer of his virtues, and an acknowledged medium of veneration, became to posterity the very object of respect; time, and the indistinctiveness of vision caused by time, transformed that respect and veneration into religious awe, and what was once a statue stood forth a god. — *C. N. Davies.*

THE BOUQUET AND THE BIBLE.

THE day was a fine day, but an unexpected shower suddenly drove two or three little parties into the cottage for a temporary shelter: a Bible and a bouquet of flowers lay upon the table.

A shrewd looking man, one of the company, approached the table; he was an infidel. He opened the Bible, and closed it again with a smile that was mingled with derision. He then took up the bouquet. "This suits me best," said he, with an exulting air; "for it has no mysteries. I can understand it; its colours are fair, and its scent delightful." Saying this, he pulled a flower from the bouquet, and stuck it in his bosom.

A pause succeeded, but it was soon broken by an old gentleman, whose meek and mercy-loving face was grateful to gaze on; and whose grey hair entitled him to respect. He had heard the observation of the infidel, and felt anxious to counteract its influence; advancing to the table, he also took up the bouquet.

"How bounteous in his gifts," said he, "is the Father of mercies! This bouquet is delightful. How delicately formed are these beautiful flowers! How rich are their varied tints, and how sweet is the fragrance they exhale! But shall we forego the joy of inhaling their fragrance, and the delight of gazing upon their beauty, because we cannot explain the hidden mysteries of their existence? We know not how the dry,

husky, unsightly seed, when set in the ground, could start up into such glorious forms. We cannot tell how it is that from the same soil such different stems should spring, and on the same flower such varied tints appear; nor know we why some of the fairest and sweetest of flowers should be thickly pointed with thorns. These things are mysteries; but if we wait till we can comprehend them, the flowers will fade away, for their life is short. Let us gaze then on their beauty, and inhale their fragrance while we may.

"And why should we not," continued he, putting down the bouquet, and taking up the Bible, "Why should we not use the word of God in the same way? This blessed Book prompts us to all that is good, warns us against every thing that is evil, and amid the darkness of this bad world, points us to a brighter and a better. Mysteries it has, deep and awful mysteries, which its Almighty Author alone can explain; but shall we waste our short lives in brooding over them, and neglect the greater part which is quite plain, and overlook the manifold mercies it proffers for our acceptance? While the Holy Scriptures reprove us in error, guide us in difficulty, console us in sorrow, and support us in sickness and in death, shall we undervalue and neglect them? Never! Let us leave, then, all mysteries, both of providence and grace, till it shall please God to unravel them to our understanding; and in the mean time, let us, while rejoicing that God's works and word both show that he is 'The Wonderful,' gratefully place the glowing flowers of the bouquet in our bosoms, and the glorious consolations of the Bible in our hearts."

SCHOOL FOR BULLFINCHES.

A SCHOOL for bullfinches may sound oddly, and to speak of their education may appear equally strange; yet, what is the fact? It appears that in the month of June, the young ones, which are sought for in the nests of wild birds, are taken when about ten days old, and brought up by a person, who by care and attention so completely tames them, that they become perfectly docile and obedient.

At the end of about two months, they first begin to whistle, from which time their education begins; and no academy can be more diligently superintended, or have pupils more effectually trained,

than that of bullfinches. At first they are formed into classes of about six in each; and after having been kept a longer time than usual without food, a privation which children think it very hard to endure, and still more, confined in a dark room, the tune they are to learn is played over and over again on a little instrument called a bird-organ, the notes of which greatly resemble those of the bullfinch.

For a time, perhaps, the birds sit moping and in silence, not knowing what to make of such proceedings; but, after a while, they begin one by one to imitate the notes they hear. As soon as they do so, light is admitted into the room, and they are allowed a small supply of food. The sound of the organ, and the circumstance of being fed, become by degrees so associated, that the hungry bird is sure to imitate the notes as soon as they are heard. They are then given to the care of boys, whose sole business is to carry on their education, each one having a bird placed under his charge, who plays away as many times as the bird can attend, during which their first teacher or feeder goes his regular rounds, scolding or rewarding his feathered scholars by signs and modes he has taught them to understand, until the tune becomes so familiar that they will pipe it to the end of their lives.

R.

SOVEREIGNTY OF GOD.

HOMER tells us that Ulysses held the winds in a bag, to enlarge or shut up at his pleasure! We know, however, that it is only the true God that can do this. He alone hath the winds in his custody, which, when he pleaseth, "he brings out of his treasures." He hath the full exercise of power, both for the dispensation and execution of laws, the portion of shame, or the crown of glory. Judgment or mercy are the pay of his exchequer. He destroys and he saves; he scatters abroad and collects again, banishes and repels, kills and makes alive; ruling the grave by so high a hand, that when the first death has arrested these bodies of ours, he by his power can bail them, can recall the breath which is fled, and transplant the defaced ruins of nature, out of that corruptible mould wherein they were buried, into the kingdom of glory; for as the kingdom, and the power, so the glory is His.—*Henry King*



Mount Sinai.

JOURNEY FROM CAIRO TO MOUNT SINAI AND JERUSALEM.

Just without the city, near the splendid but now neglected tombs of the califs, we halted for a time, to adjust the loads of the camels for the journey, which could not so well be done in the narrow streets of the city. Then we launched forth into the desert; and travelling onward till darkness overtook us, we pitched our tent for the night in a shallow wady, or bed. It was a new and exciting feeling, to find ourselves thus alone in the midst of the desert, in the true style of oriental travel; carrying with us our house, our provisions, and our supply of water for many days; and surrounded by camels and the wild sons of the desert, in a region where the eye could find nought to rest upon but dreary desolation. It was a scene which had often taken possession of my youthful imagination, but which I had not dared to hope would ever be realized.

The desert of Suez is not sandy; its surface, for the most part, is a hard gravel, often strewed with pebbles. During the present season, there had been no rain, and the whole appearance of the desert and its wadys was dry and parched.

Nor did the desert change its character for the better as we approached
OCTOBER, 1839.

Suez. Hills and mountains, and the long narrow strip of salt water, were indeed around and before us; but not a tree, nor scarcely a shrub, and not one green thing was to be seen in the whole circle of vision. Nor is a drop of fresh water to be obtained. All the water with which Suez is supplied for personal use, is brought from three hours' distance across the gulf, and is so brackish as to be scarcely drinkable. In the desert, we had frequent instances of the mirage, presenting the appearance of lakes of water and islands; and as we began to descend towards Suez, it was difficult to distinguish between these appearances and the distant real waters of the Red Sea.

We reached Suez on the fourth day, from Cairo; pitched our tent on the shore without the walls, and remained there twenty-four hours.

Leaving Suez late the next day, we took our course around the head of the gulf, the better to observe the features of the country. We pitched our tent at night over against Suez, but somewhat lower down, not far from the place where the Israelites probably came out upon the eastern shore. Here, at our evening devotions, and near the spot where it was composed and first sung, we read, and felt in its full force, the magnificent triumphal song of Moses:

—"The Lord hath triumphed gloriously; the horse and his rider hath he thrown into the sea." A desert plain extends along the eastern shore of the gulf for nearly fifty miles, bounded on the east by a range of hills or mountains twelve or fifteen miles from the coast.

We took the upper road to Sinai, which leads across a portion of the great sandy tract lying between the high northern ridge Et-Tih, and the more southern clusters of Sinai. Et-Tih is a long level ridge of sandstone, stretching across the whole peninsula. We turned aside also to the right a short distance, to visit the solitary and mysterious monuments of Surâbit el-Khadim. Travellers have supposed these monuments to be tombstones. They are evidently of Egyptian origin, being covered with hieroglyphics indicating a high antiquity, but they have nothing of the character of an Egyptian cemetery.

We approached the central granite mountains of Sinai, directly from the N. N. W., through a steep, rocky, and difficult pass, between rugged, blackened cliffs, eight hundred to one thousand feet high. Approaching in this direction, we were surprised and delighted to find ourselves, after two hours, crossing the whole length of a fine plain, from the southern end of which that part of Sinai now called Horeb, rises perpendicularly, in dark and frowning majesty. This plain is above two miles in length, and nearly two-thirds of a mile broad, sprinkled with tufts of herbs and shrubs, like the wadys of the desert. It is wholly inclosed by dark granite mountains, stern, naked, splintered peaks and ridges, from one thousand to fifteen hundred feet high. On the east of Horeb, a deep and very narrow valley runs in like a cleft, as if in continuation of the south-east corner of the plain. In this stands the convent, at the distance of a mile from the plain, and the deep verdure of its fruit trees and cypresses is seen as the traveller approaches—an oasis of beauty amid scenes of the sternest desolation. On the west of Horeb, there runs up a similar valley, parallel to the former. It is called El-Leja, and in it stands the deserted convent El-Erbayin, with a garden of olive and other fruit-trees, not visible from the plain.

The name Sinai is at present applied, generally, to the lofty ridge running from N. N. W. to S. S. E. between the two

narrow valleys just described. The northern part, or lower summit, is the present Horeb, overlooking the plain. About three miles south of this, the ridge rises and ends in a higher point; this is the present summit of Sinai.

The plain above mentioned, is, in all probability, the spot where the congregation of Israel were assembled to receive the law; and the mountain impending over it, the present Horeb, was the scene of the awful phenomena in which the law was given. As to the present summit of Sinai, there is little reason to suppose that it had any connexion with the giving of the law. I know not when I have felt a thrill of stronger emotion, than when in first crossing the plain, the dark precipices of Horeb rising in solemn grandeur before us, I became aware of the entire adaptedness of the scene to the purposes for which it was chosen by the great Hebrew legislator.

We were kindly received at the convent, after being hoisted to its narrow entrance; and remained there five days, visiting in the interval the summits of Sinai, Horeb, and St. Catherine.

We left the convent March 29, on our way to Akabah.

* * * * *

We left Akabah late in the afternoon of April 5, and reascending the plain of wady Araba, began to ascend the western mountains by the great Hadj route. We soon encamped for the night; and from this point we had seven long days' journey to Hebron. The ascent afterward is steep and difficult. The way is almost literally strewn with the bones of camels, and skirted by the graves of pilgrims; all testifying to the difficulty of the pass. On arriving at the top of the pass, we soon came out upon the great plateau of the western desert, and found ourselves higher than the mountain peaks which we had seen from below, and through which we had just ascended. Not far from the top of the pass we left the Hadj route; and turning off in a direction about N. N. W. we launched forth again into "the great and terrible wilderness."

For the first two days, the general character of this desert was similar to that between Cairo and Suez; a vast unbounded plain, a hard gravelly soil, irregular ridges of limestone hills in various directions, the mirage, and especially the wadys or water-courses.

All our Arabs gave to this part of the desert the name Et-Tih, the desert of wandering. The wadys are here frequent; at first they all ran north-west into the main water-course of this part of the desert, wady Jerâfeh; which, having its head far to the south, runs in a north-east course to join the valley El-Araba, nearly opposite to wady Mûsa. We crossed wady Jerâfeh about the middle of the second day, and were struck with the traces of a large volume of water which apparently flows through it in the winter season. On the morning of the third day, we reached the water-summit (wasser-scheide) of the desert; after which all the wadys ran in a westerly direction into the great water-course which drains the more western part of the desert, and flows down to the sea near El-Arish.

Almost from the time we entered upon this vast plain, we had before us, as a land-mark, a high conical mountain, apparently isolated, along the western base of which we were to pass. It bears the name Araif en-Nâkah, and a lower ridge extends from it eastward. For nearly three days, this mountain of the desert was before us. As we approached it on the third day, the country became rolling and uneven, and the hills more frequent. After passing the mountain, our course turned more toward the N. N. E., and the character of the desert was changed.

From this mountainous district many broad wadys flow down towards the west; and between them are elevated ridges of table land, which the road crosses. Early on the fourth day, we crossed a broad wady called El-Lussân, marking perhaps the site of ancient Lysa, but we could discover no trace of ruins. In the forenoon of the fifth day, we diverged a little to the left, to visit ruins which had been described to us under the names Aujeh and Abdeh, and which are doubtless the remains of the ancient Eboda. They consist of the walls of a large Greek church, and an extensive fortress, both situated upon a long hill or ridge overlooking a broad plain covered with shrubs and tufts of herbs. Connected with the fortress are cisterns and deep wells, walled up with uncommonly good masonry. On the south side of the hill and below, are the ruins of houses, surrounded by traces of extensive ancient cultivation.

We were now crossing a more sandy

portion of the desert; and in the afternoon of that day, we had our first specimen of the simoon, or south wind of the desert. It came over us with violence, like the glow of an oven, and filled the air with fine particles of dust and sand so as to obscure the sun, and render it difficult to see objects only a few rods distant. This continued for about four hours. We encamped in the wady Ruheibeh, where we had never heard of ruins. But on ascending the hill on our left, we discovered the remains of a city not much less than two miles in circuit. The houses had been mostly built of hewn stone; there were several public buildings and many cisterns. But the whole is now thrown together in unutterable confusion; and it would seem as if the city had been suddenly overthrown by some tremendous earthquake. What ancient city this can have been, I have not yet been able to learn. The Arabic name suggests the Rehoboth of Scripture, the name of one of Isaac's wells, Gen. xxvi. 22; but the other circumstances do not correspond.

The wady Ruheibeh opens out towards the north into a fine plain, covered with grass, and herbs, and bushes; in crossing which our ears were regaled with the carols of the lark and the song of the nightingale, all indicating our approach to a more fertile region. Towards noon of the sixth day, we reached Khulasah, the site of ancient Elusa. It was a city, of at least two miles in circuit. The foundation of buildings are every where to be traced; and several large unshapen piles of stones seem to mark the site of public edifices. Fragments of columns are occasionally seen, but no cisterns; a public well, which is still in use, seems to have supplied the city.

After crossing another elevated plateau, the character of the surface was again changed. We came upon an open rolling country; all around were swelling hills, covered in ordinary seasons with grass and rich pasturage, though now arid and parched with drought. We now came to wady Seba; and on the north side of its water course we had the gratification of discovering, April 12, the site of ancient Beersheba, the celebrated border city of Palestine, still bearing in Arabic the name of Bir-seba. Near the water-course are two circular wells of excellent water, more than forty feet deep. They are both surrounded with

drinking troughs of stone, for the use of camels and flocks; such as doubtless were used of old for the flocks which then fed on the adjacent hills. Ascending the low hills north of the wells, we found them strewn with the ruins of former habitations, the foundations of which are distinctly to be traced. These ruins extend over a space half a mile long, by a quarter of a mile broad. Here then is the place, where Abraham, and Isaac, and Jacob, often lived. Here Samuel made his sons judges; and from hence Elijah wandered out into the southern desert, and sat down under the rethem, or shrub of broom, just as our Arabs sat down under it every day and every night. Over these swelling hills the flocks of the patriarch roved by thousands; we now found only a few camels, asses, and goats.

From Bir-seba to Hebron we travelled about thirty miles. The general course was north-east by east. After an hour and a half we came out upon a wide open plain, covered with grass, but now parched with drought. Fields of wheat and barley were seen all around; and before us were hills, the beginning of the mountains of Judah. At Dhoheriyeh, the first Syrian village, our good towara left us; and we parted from them not without the kindest feelings and deep regret. For thirty days they had now been our companions and guides, and not the slightest difficulty had occurred between us. The hills and pastures around Dhoheriyeh were covered with mingled flocks of sheep and goats, and herds of neat cattle, horses, asses, and camels, in the true patriarchal style of ancient days.

We took other camels, and proceeded to Hebron. Here the "pool," over which David hung up the assassins of Ishbosheth, still remains, and fixes the site of the ancient city. The cave of Machpelah cannot well have been within the city; and therefore the present mosque cannot cover its site. We could not but notice the fertility of the surrounding valleys, full of fields of grain, and of vineyards yielding the largest and finest clusters of all Palestine; and likewise the rich pasturage of the hills, over which were scattered numerous flocks and herds. Yet to a careless observer, the country, in general, can only appear sterile; for the limestone rocks everywhere come out upon the surface, and are strewn over it in large masses

to such a degree, that a more stony or rocky region is rarely to be seen.

We took the direct road to Jerusalem. It is laid with stones in many places, and is doubtless the ancient road, which patriarchs and kings of old have often trod. But it is only a path for beasts; no wheels have ever passed there. We hurried onward, and reached the holy city at sunset, April 14, just before the closing of the gates on the evening before Easter Sunday.—*Dr. Robinson.*

"IF I WERE YOU."

"If I were you, Frank," said Arthur Longley, "I would certainly crop the ears and tail of that Shetland pony; he looks as uncouth as a hermit."

"Perhaps if I were you," replied Frank with a smile, "I should do so; but being myself, I think and feel differently, and therefore I act differently. To me, the beauty of an animal is to be just as his Creator designed him; all the torturings of art I consider to result in positive deformity."

Arthur pursued his argument, and endeavoured to persuade Frank to adopt his views, or at least to follow his suggestions; but Frank was not so easily moved, and the pony passed through life in full possession of all his appurtenances.

"If I were you, Emily," said a gaily dressed young lady to a friend of mine, whom she met at a tea party, "I should be perfectly ashamed to be seen in that old velvet pelisse of yours."

"Why?" inquired Emily: "it is a very good pelisse, and I am not conscious of any disgrace connected with it; I came by it very honestly."

"Ridiculous! who ever dreamt any thing to the contrary? But you have worn it to my certain knowledge, the last three winters."

"Well, that is more to the manufacturer's honour than to my disgrace. If it serves me three winters more, so much the better."

"Now really, Emily, if I were you, I should be ashamed to make such a niggardly speech, when every one knows you could afford to have a new one every winter, if you chose it."

"Every body is very knowing; but while others have new dresses as often as they please without my interference, I think they have no right to be scandalized

at my wearing mine as long as I think proper."

"Oh, certainly not! You have an undoubted right to do as you please; I only say that I should do very differently, if I were in your place. As it is, though I could not well afford it, I have bought an Indian shawl and a silk pelisse this winter, and they really begin to look shabby already. However, it is almost time to be thinking about something for spring variety. I only wish I had your purse; instead of being known year after year by one old pelisse, I would have something fresh every season, if not every month. You know we ought to do so to make good for trade."

"I am not sure that we are under any obligation, for the good of trade, to lay out so much money upon personal apparel as to circumscribe our resources for other purposes; then, too, our requirements in the articles of dress are very much affected by our habits in other respects. You say, if you were me, you should dress very differently from what I do. But I think it very likely that if I were you, or went into company as much as you do, and saw those around me following every new variety of fashion, I should soon fancy that I must do the same. But my habits are very retired, I seldom mix in gay society; and if my apparel is all that is required for comfort and respectability, there are so few persons likely to take the trouble of noticing it, that I have no temptation to bestow upon it more time and money than is necessary."

Now Emily was always neat and well dressed. To say the truth, I had already been much struck with her appearance, which was as remote from carelessness and shabbiness as it was from fantastic fashion and superfluous display; and the good sense and candour which she discovered in her defence of herself and her velvet pelisse, confirmed my previous good opinion of her, which an increasingly intimate acquaintance of many years standing, has in no respect weakened. Her very countenance and expression convinced me that niggardliness formed no part of her character. I could not feel so sure that the lavish profusion of her young antagonist was altogether free from mean selfishness. However, with that I will not interfere; but I may question whether she who said, "If I were you, Emily, I would spend much

more on personal decorations," if she had been Emily, would always have economized her personal expenses to preserve the nurse of her childhood from parish dependence, and to bestow education on the destitute orphan of the friend of her youth.

"If I were you, Mortimer," said Captain Tankerville, when my cousin Ellen was detained from a dinner party by attention to a little one who had the measles, "if I were you, I would not suffer my wife to immure herself in the nursery. It is really a shame for society to be deprived of her attractions. I am sure even uncle Barnaby must cry out against the young interlopers for depriving him of his favourite organist. Ellen certainly might have trusted the nurses for one day rather than inflict disappointment on such a party as this." The Captain looked at my uncle as if half hoping for his support. My uncle returned the look as if he had no remark to make. The Captain directly appealed to my uncle, whether, if he had been Mortimer, he would not have insisted on his wife leaving her nursery for a few hours to fulfil an engagement with society. "It is hard to say," replied my uncle, "how I should act if I were not myself; but, as far as I can tell, if I were Mr. Mortimer, I should wish my wife to make herself happy in the way of her own choice, provided that choice did not run counter to the claims of duty; and I rather think I should be very well pleased to find that her preference lay in self-devotion to duties of the highest order, and which cannot be delegated without disadvantage to the dearest and most sacred trust. My niece's musical performance is very delightful to me; but it delights me far more to know that she now prefers the music of the nursery."

"If I were you, Mr. Johnson," said a dashing young tradesman to his old-fashioned neighbour, "I would certainly have this shop new fronted and remodelled throughout. With plate glass windows, and mahogany counters, and a considerable display of modern articles, you might easily do more than double your present trade. This dull-looking place is enough to drive away customers." "May be so," replied Johnson; "some are better driven away than invited in. Those that have dealt with me longest, best know whether it is worth their while

to come again. I have always depended more on the quality and price of my goods within, than upon the dashing appearance of my shop without. Here I have been upwards of twenty years, and though I have not jumped into a great fortune, like some of my speculating neighbours, neither have I been ruined like many others. By the blessing of God on honest plodding industry, I have been enabled to bring up my numerous family in comfort, and I never meet the man that I am ashamed to look in the face. I do not say, if I were you, I should adopt the same humble scale of beginning, and the same quiet mode of proceeding with which I am now satisfied; but I think if I had to begin again, I should prefer the same course myself." Twenty years have elapsed since this conversation. Old Johnson still maintains his ground, and has lately taken into partnership two of his sons. The old shop has been new-fronted, and in many respects modernized; for it was necessary that the house should undergo a thorough repair, and Mr. Johnson was not so prejudiced as to reject all modern improvements, and spend his money on rebuilding in the old style what was unsightly or inconvenient. The shop is much lighter, and the shelves better arranged than formerly, and the establishment is as much frequented as ever, perhaps as much as any shop in the town, though there are neither mahogany counters nor plate glass windows to attract the customers. One careful purchaser is continually saying to another, "If you want a real good article, and at a fair price, go to old Mr Johnson's, he will not deceive you;" and thus the custom of the shop is well kept up. The young man who twenty years ago suggested improvements which Mr. Johnson deferred, has two or three times set off in a dashing style, and as often experienced a speedy downfall, and involved many in the ruinous consequences of his bold speculations, and at last is gone to America with the confident, but perhaps ill-founded hope of repairing his shattered fortunes.

"How much longer, Mr. Gilbert, do you intend to toil behind the counter? Really, at your time of life, and with so few to provide for, it is high time for you to retire and begin to enjoy life. If I were you, I would dispose of the business and take a house in the country, or travel about a little. At all events, I

would have a regular summer's excursion for a month or two, and not be pent up here from one year's end to another, as if you had a large family to care for, and not a guinea beforehand with the world. If I had realized your property, I would act very differently from what you do."

"That's very likely," replied Mr. Gilbert, "you have a taste for travelling about, and going to watering places, and amusing yourself like a gentleman; I have none. I reckon a day's pleasure far more fatiguing than a day's business, and as to taking a country house and having nothing to do, it would drive me mad in less than six months. Business is what I have been used to all my life, and nothing would ever suit me so well. I never knew much good come of such people as I am leaving business and setting up for gentlemen. I could not live a life of idleness."

"Idleness," rejoined the antagonist, "a retired gentleman need not live an idle or a useless life. Think how much good you might do with your property and leisure. There's our old neighbour Downing, I often envy him; he left business just in the right time to enjoy the sweets of retirement, the cultivation of his mind, the society of his family, the promotion of the best interests of his neighbours. Why, sir, he is doing ten times the good in the world, and enjoying a hundred-fold more happiness than if he had gone on seven years longer, toiling to accumulate more property. It is a great thing, neighbour Gilbert, to know when we have got enough."

"Yes, I suppose it is, Master Best; but every one likes to fix his own standard of what is enough, and what is the best way of enjoying himself, and doing good to others. For my part, I don't know that I am more anxious to amass property than either yourself or Mr. Downing, or less willing to part with it in any good cause. But if your fancy is for a country life, and you envy Mr. Downing his retirement, and blame me for remaining in town, why, if I were you, I'd just follow my bent, and retire into the country; you know very well that you have property enough to do it if you choose."

"I retire, Mr. Gilbert! I wish I could afford it. To be sure, I have done pretty well, considering all things; but what is my property to Mr. Downing's?"

"You know best about that. I only say what I would do if I were you,

seeing you have so great a desire to do it. There is no obligation on you to count just as many thousands as Mr. Downing, or to have as large a house, and keep as many servants. Many people lead a country life, and do a great deal of good on a smaller scale."

"Well, true, I wish it may be in my power to do the same; for after all, the great object we keep in view should be, pious usefulness rather than personal gratification and aggrandisement. I assure you I do look forward with eager desire to the period when I shall be able to devote myself to the sacred and delightful employ of doing good; but I cannot do it just at present."

"Ah," said my uncle, who happened to hear this conversation, "how much more quick-sighted are we to discern another's duties and capabilities than our own! And how easy it is to say, 'If I were you I would do what you can and I cannot,' when our insincerity is proved by the palpable fact of our not doing what we can."

"What an ill-managed set of children those little Bentleys are!" exclaimed Mrs. Churchill: "if I were their mother, I should be quite ashamed of them. There is a boy of four years old that absolutely can't tell his letters, and the two girls, the eldest of whom is seven, have not yet been sent to school, but are romping about like colts on a common; and the little one, of more than a year old, is kicking and rolling on the floor, without a single effort to teach him to walk. If I were Mrs. Bentley, I should be ashamed of such indolence; and I am sure I would not encourage a nurse-maid in it."

"Are you quite sure," said a more candid lady present, "that the methods of Mrs. Bentley, which you so much condemn, originate in indolence? May they not result from her adoption of a system different from your own, on which—however mistakenly—she conscientiously pursues the methods which she considers most conducive to the welfare of her children?"

"Perhaps it may be so; but it is very different from what I should do if I were in her place."

"Doubtless it is, if you carried your present sentiments into Mrs. Bentley's circumstances; but before we allow ourselves bitterly to censure the actions and condemn the spirit of others, we ought at least to make ourselves acquainted with

the principles on which they act. Without at all reflecting, Mrs. Churchill, on your principles or practices, I have the pleasure to assure you, from a long and intimate acquaintance with Mrs. Bentley, that she is one of the most devoted and diligent of mothers. It is not from indolence but from principle that she endeavours to check rather than elicit precocious efforts, either of the physical or intellectual powers of her children; and as I have had an opportunity of judging, I consider her system most favourable both to bodily and mental vigour: indeed, I suspect that a thorough and candid investigation of the matter, would lead some other mothers to adopt rather than condemn her methods."

"What a shame it is that the Misses Ellis never attend the Dorcas Meetings! They can have nothing particular to hinder them. If I were one of them, I should be quite ashamed to be so wrapped up in selfishness; it must be either pride, or stinginess, or love of pleasure, that keeps them from joining us. When they came into the neighbourhood, everybody expected that they would prove an acquisition to the various societies; but they never make their appearance at any of them."

"Young lady," said my uncle Barnaby, "if you were one of the Misses Ellis, you would think and feel very differently from what you do, at least in one respect. You would not be so ready to form a hasty and censorious judgment on imperfect information. It is possible that you may be absent from some party, or stand aloof from some engagement with which the ladies to whom you have referred, might wish to see you identified; but I can venture to say, not one of them would think of assigning motives for your conduct which you yourself had never avowed. Mrs. Mortimer, who is well acquainted both with the society and the ladies in question, can perhaps explain to your satisfaction the reasons of their conduct, and obtain from you their full acquittal from the several charges you have brought against them."

"Yes," replied my cousin Mortimer, "I feel happy in being able to vindicate my friends, and have no doubt of convincing the young lady that their conduct is what it ought to be, and leading her to wish that hers might be equally honourable if she were in their place. The health of Miss Margaret Ellis is exceedingly delicate, and almost entirely

confines her to the house during the winter season; nor can she at any time bear the excitement of company. Mrs. Ellis is blind, or so nearly blind, as to be deprived of all literary and intellectual gratifications, of which the sense of seeing is the avenue. Her only employment is knitting. Miss Anne Ellis, though healthy, cheerful, and every way capable of enjoying and delighting society, conscientiously devotes herself to alleviating the privations and multiplying the pleasures of her afflicted mother and sister. She never spends one evening from home, because she will not deprive them of her company and the gratification of hearing her read aloud, on which the mother entirely depends for all her acquaintance with modern literature, as well as the refreshment of her memory in intercourse with those authors with whom she was formerly familiar. While the absence of these ladies from our working parties is justly a matter of regret to ourselves, the circumstances I have stated will, I think, relieve them from the charge of staying away either from pride or a love of pleasure; and that stinginess does not keep them back, appears from the fact that their contributions to the funds of the society are larger than those of any other family, and that a double portion of the needle-work is, by their desire, sent to be executed in their house."

"I hope, my young friend," said uncle Barnaby, addressing the lady who had so freely uttered her censures, and on such mistaken grounds, "I hope if you were one of the Misses Ellis, you would do as they do; and that being as you are, you will see the wisdom of exercising candour in judging, and modesty in expressing an opinion of those whose circumstances you very imperfectly understand."

"I hope so, sir," said the young lady, in a tone of unaffected humiliation; and there is reason to believe the lesson was not soon forgotten, and that it did not altogether fail of producing practical results.

"I consider it a most unneighbourly and ungentelemanly action of old Barnard to build that house just in view of your grounds. It cannot be regarded otherwise than an act of direct hostility, and if I were you, I should resent it exceedingly, and take every occasion of annoying him in return. The view should be entirely intercepted by a thick plantation

or the erection of a high wall; indeed, having all the surrounding land in your possession, you might easily, in one way or another, render the house absolutely untenable; and if I were you, I certainly should do it. It would serve him exactly right, a churlish old fellow. I told his work people myself that he would never dare to do it; or, if he did, that you would certainly be a match for him."

"I am sorry, Captain," replied my uncle, "that you should imagine yourself called upon to avenge my quarrels, or stir up my resentments. We are all quite apt enough to take fire in our own cause, whether or not any offence was intended; and it is the duty of friendship to endeavour to allay rather than excite irritation. I am not aware of ever having given cause of hostility to my old neighbour Barnard, nor do I suspect him of any intention to offend or injure me. The plot of ground is his own; nor have I any right to dictate to him whether or not he shall build upon it. I would gladly have purchased the ground, but he was not disposed to sell it. The thing is of no great value in itself; but it is dear to him, as it was his father's freehold, and the spot on which he was born. We have most of us little partialities of this kind; and far be it from me to be offended at those of my neighbour, even though they may, in a slight degree, interfere with some little preferences of my own. Houses are wanted in the neighbourhood, and it is not at all surprising that Mr. Barnard, a plodding, matter-of-fact-man, who has risen by his own industry, and knows the value of money, should be inclined to turn his property to the best account by building a house upon it; or that he should be so little alive to the picturesque as not to consider whether the erection would improve or disparage my prospect, though not quite so insensible as to deprive his future tenant of the privilege of overlooking it. It would ill become me, however, to indulge resentment or to practise retaliation against my neighbour."

"Well," returned the Captain, "every man to his humour; but I think you are much to blame to take the matter so tamely. By taking it up with a proper spirit you might soon bring him to reason; and that's what I certainly would do, if I were you."

"That's what I intend; and hope to

boy Captain; but you must allow me to place my standard of a proper spirit, not exactly in what I should do if I were you, or if I were Mr. Barnard, but what I ought to do in obedience to the universal rule, 'Whatsoever ye would that men should do to you, do ye even so to them.' Matt. vii. 12.

This appeal to Scripture silenced the Captain. The next day my uncle called on old Mr. Barnard, who at first behaved in a rather surly, snappish manner, saying he had as good a right to build what he pleased on his four acres, as my uncle had on his four hundred; and he would not be dictated to by the greatest lord in the land.

"A soft answer turneth away wrath: but grievous words stir up anger," Prov. xv. 1.

Uncle Barnaby adopted the former method of dealing with his angry neighbour, and its efficacy was fully proved.

After a little conversation, Mr. Barnard declared that he had not originally the least intention of giving offence to his bold and highly-respected neighbour, and should never have thought of doing a spiteful thing, but for the message he received, daring him to execute his purpose; and threatening him that if he did, my uncle would be a match for him.

Thus all the strife had arisen from the interference of the impertinent, meddling Captain. The matter was soon amicably adjusted: at every stage of the building my uncle's taste and wishes were consulted. Frank was requested to furnish a design, and the building was so constructed as really to form a new object of beauty and interest in the view from the hall; and when completed, was occupied by a family who proved a valuable addition to uncle Barnaby's circle of society.

"If I were you," said one poor woman to her neighbour, who had set one of her little girls to sweep the house, and the mother to wash the dishes, "if I were you, I would ten to one rather do those things myself. You would find it much less trouble than teaching the children to do them."

"And if I were you," said another neighbour, addressing herself to the first speaker, "I would make my girls work, and have a little rest myself. I have no notion of a mother slaving herself as you do; while her great girls are drest up like blue fine ladies, to sit and do nothing."

"I do not agree with either of you," said the mother whose employment of her children led to the remark. "I do

not set my girls to work for the sake of sparing myself, or because I consider it less trouble; but because I think it is a duty I owe to my children, while I am with them to teach them how to do useful things, that they may not be ignorant and helpless when they have to shift for themselves. Perhaps it may be more trouble to me at first, to stand by them and make them do things properly; but it will not always be so. In a little time they will be able really to help me, and then I shall be able with satisfaction to rest myself if my strength should fail, or to employ myself about something else that may be for the good of all the family. So what is good for one, in the long run proves good for all."

"That woman has some sense in her," said my uncle; "she acts upon sound and judicious principles; not upon what others would do or suggest, or upon what she imagines she should do if she were in the place of others, but upon what she perceives to be the line of present duty, and with a proper concern to qualify herself and those intrusted to her care, for the due discharge of the duties of future life."

"I think, uncle," said Frank, "that they are almost always silly people who have a habit of saying, 'If I were you.'"

"I think they are, Frank: at least, it is a very silly phrase, and it is a pity if sensible people adopt it. In the first place, they seem to lose sight of the identity of character. Circumstances elicit character, but they do not originate it. Could we change situations with the person to whom we address the phrase, both would still discover the same leading bent of character. If I were myself in your circumstances, I might act differently from what you do; for I should act upon my present principles; but if I were you, I should act exactly as you act yourself. You recollect the reply of Alexander to Parmenio?"

As the anecdote, though well known, was then new to me, Frank kindly repeated it. When Darius, king of Persia, offered to Alexander all the country west of the Euphrates, with his daughter Statira in marriage, and ten thousand talents of gold, Parmenio, a favourite general in the army of the conquering monarch, took occasion to say, that if he were Alexander, he would, without hesitation, accept the terms of Darius. "And so would I," replied Alexander, "if I were Parmenio."

"Alexander," said my uncle, "could

not divest himself of his purpose of entire and absolute conquest; that was the one determination of his soul, and he must divest himself of himself before he could accept any thing short of it, however advantageous and ample it might appear to another person who had not his mind. Scripture affords us some fine parallels, but on nobler principles than those of Alexander. When David once and again had his bitter enemy and persecutor Saul completely in his power, those around urged him to improve the opportunity to rid himself of his adversary, and make way for his own promised advancement. The suggestions of David's followers were precisely in the spirit of 'If I were you;' but in David there was another spirit—a spirit derived from a nobler and holier source; and he said, 'The Lord forbid that I should do this thing unto my master, the Lord's anointed, to stretch forth mine hand against him,' 1 Sam. xxiv. 6; xxvi. 9. When Paul, on his progress to Jerusalem, received the prophetic intimation, that bonds and imprisonment awaited him, his friends, measuring his zeal by their own more ordinary standard, besought him not to go up to Jerusalem; but he replied with heroism, of which Alexander was incapable, 'What mean ye to weep and to break mine heart? for I am ready not to be bound only, but also to die at Jerusalem for the name of the Lord Jesus,' Acts xxi. 11—13. A person possessing decision of character has a standard of his own which the generality of people cannot at all understand; and it is supposing an absurdity to talk of what he would do in their place, or what they would do in his."

"Do you not think, uncle, that those who use the phrase are generally people of a meddling disposition, who look more after other people's business than their own?"

"Yes, Frank, that is almost universally the case. They are eagle-eyed to discern the duties and failures of other people, but blind as moles or bats to their own. It is soothing to our self-complacency to imagine, that if we were differently situated, we should act better than we now do, and better than others do who are in the circumstances we contemplate. Then, too, when we are disposed to say, 'If I were you; or, If I were he, I should do so and so,' it would be well to recollect that we cannot form an accurate idea of what the circumstances of

another person really are, and therefore a judgment founded upon them will, in all probability, be erroneous, and lead to a train of injurious practical results. Instead of vainly speculating what another ought to do, and what we should do in his place, it would be well for us to listen to our Saviour's voice, 'What is that to thee? follow thou me,' John xxi. 22."

"The phrase is objectionable, as it is generally indicative of a disposition to compare our conduct with that of others, instead of the perfect and unvarying rule of duty. This lowering of the standard infallibly leads to deterioration of character. No man reaches as high as he aims; and, if instead of aiming at what is positively right, and what the Lord our God requires of us, we content ourselves with being a 'little better than others,' we are likely rapidly to descend in the scale of morals to 'as good,' 'nearly as good,' 'not much worse,' 'bad,' 'very bad indeed.'"

"As we have begun talking about this silly phrase, we must not dismiss it without remarking that it is seldom unaccompanied by a spirit of envy. If I were you,' generally means, 'Oh that I were you!' or rather, 'Oh that I possessed your advantageous circumstances!' Absalom's vain and insinuating professions of what he would do if he were judge or king, was an indication of his coveting the crown, and a preliminary step to his conspiracy to obtain it, 2 Sam. xv. 3, 4. A disposition to be content with such things as we have, and to do our duty in that state of life in which it has pleased God to call us, would certainly cure us of the foolish habit of looking on the stations and advantages of others, and saying or thinking, 'If I were you, what great things I would do and enjoy!'

"It may sometimes be very useful to reverse the sentiment, and looking at our own circumstances and duties, with a sincere desire to discharge them aright, to bring before us one of the best models of wisdom, diligence, perseverance, and piety that have been placed within our knowledge, and say, 'If he were in my place, how would he act?' This, of course, must be done in subordination to the express rule of duty given us in Scripture. When we have explicit directions given us there, we need no human standard to teach us what is right; but we may safely derive from well-selected examples that which corroborates and illustrates the principles we derive from Scripture, and

teaches us the practicability and pleasure-
ableness of obedience to its dictates, as
exemplified by sinful and imperfect crea-
tures like ourselves.

"And what would Jesus have done
in our circumstances? He is the only
infallible and perfect Model. He passed
through scenes of duty and trial like our
own; that He might both sympathize
with our difficulties, and leave us an ex-
ample that we should follow in his steps."

C.

"DO IT, AND IT WILL BE DONE."

(See page 340—348.)

Frank's Letter to Samuel.

AUGUST 1839.

DEAR SAMUEL, — On reading your
papers this month of illustrations of
dear uncle Barnaby's favourite max-
im, I am surprised that you should have
overlooked one of his applications of the
sentiment; "Do it, and it will be done,
and will not thrust out or interfere with
the discharge of future duties." Surely
you cannot have forgotten that vexatious
servant of my uncle's, who always had
on his tongue's end the answer, "I am
doing, sir, what you bid me." His whole
course was a profession of obedience,
connected with the practice of disobe-
dience. No doubt this slight reference
will recall to your mind twenty instances
of his provoking conduct. I remember
old Mrs. Rogers (who, you know, always
superintended the brewing) ordering
him to take the cart and fetch home
some malt, charging him to be there
before six o'clock, or the malt-house
would be shut; and after his return to
bring in fuel for the copper, which was
to be lighted early in the morning. When
Mrs. Rogers appeared next morning in
the brewhouse, expecting to find the cop-
per boiling, she found the water cold, and
the fire unlighted; and, not quite without
an expression of anger, called to George
to inquire the reason of the neglect.
"Yes, ma'am, I will do it directly; I am
just cutting up the wood as you bid
me," was his provoking reply. "But
I desired you to cut the wood last night,
after you returned from the maltster's."
"Yes, ma'am; but I was not back in
time: it was dark when I returned." Wishing
to cut short the idle fellow's
excuses, and, perhaps, too, anxious for
the preservation of her own temper, the
good woman made no further remarks,
but bade him hasten to light the copper-
fire. The copper was boiled, and empt-

ied, and filled again, and that stage of
the process of brewing had arrived at
which the malt should be put to the
liquor. When Mrs. Rogers directed
her trusty *aide-de-camp* to bring the
malt, he replied, "I am just going to fetch
it, as you bid me;" and forthwith was
seen mounted in the cart and driving
out of the court-yard. More than an
hour elapsed before his return. In that
time, the water in the tub had become
too cold for mixing; the fire under the
copper had gone out; the whole process
was entirely deranged; and the brewing
was necessarily postponed to another
day, all the previous labour and expense
having been entirely wasted. On the
return of George, the following con-
versation ensued. "George, why did
you not go for the malt last night, as
I bid you?" "I did, ma'am; but the
place was shut up." "Then it was after
six o'clock: I told you to go before six."
"Yes, ma'am; but I was watering the
garden, as the gardener bid me; I was
forced to do that first, because he told
me to do it before breakfast in the
morning." "And why did you not
water the garden before breakfast?"
"Because, ma'am, I had to clean the
shoes and get in wood, which I was bid
to do the night before." Thus I sup-
pose he might have gone back through
the whole period of his servitude, giving
as a reason for present neglect of orders,
that he was engaged in the performance
of others formerly given. There was
a something of honesty and good feeling
about the man, that inclined my uncle
to exercise long patience with him, and
to make many efforts to break through his
idle, procrastinating habits; but at last
he was discharged uncured, if not in-
curable. I recollect, in connexion with
some of George's vexatious neglects, my
uncle remarking that "present duties
are often neglected, because we are
busy about something that ought to have
been done hours or days before." The
performance of a seemingly small duty, in
its proper time, leaves the attention and
energies free for the due discharge of
the most important; while an omission
or delay in the smallest matter often
involves an almost endless train of con-
fusion and neglect. It is only by the
timely discharge of *every* duty that we
can in any degree, at best it will be but
in a very humble degree, attain the
satisfaction of saying, at the close of any
given period, and at the close of life

itself, "I have finished the work that thou gavest me to do," John xvii. 4.

Hoping you will kindly accept my postscript to your recollections of dear uncle Barnaby, I remain,

Your affectionate Cousin,
FRANK.

THE PEOPLE OF MADAGASCAR.—No. II.

THE moral qualities of the Malagasy are less equivocal than their mental characteristics, and far more censurable and injurious. With less that is sprightly and prepossessing in manners and address, the dark-coloured tribes possess more that is commendable and amiable in social life; and there are among them more straightforwardness and honesty than in the fairer races. The latter, with the exception of the Betsileo, exhibit, with but few traits of character that can be regarded with complacency, much that is offensive to every feeling of purity, and every principle of virtue. They are often, probably, under the influence of superstition and revenge, coolly and deliberately cruel towards their vanquished in war; they appear to be naturally vain, self-complacent, and indolent, unless when roused to effort by ambition, avarice, revenge, or lust; ambition, and a love of domination appear inherent. They exhibit also a strong inclination, where they possess the means, to indulge in those gratifications which are the usual attendants on indolence, namely, gluttony and intemperance. From the debasing habits of inebriety, the population of Ankova are restrained by the enforcement of laws which make intoxication a capital crime; but if free from the restraint these laws impose, it is supposed no people would surrender themselves more to this humiliating vice than the Hovas. Their sensuality is universal and gross, though generally concealed.

The relative affections, as might be expected, are often feeble and uncertain. Family feuds are frequent, and many of the public trials before the judges are between branches of the same family. Occasionally two brothers, or a brother and sister, avoid all friendly intercourse for years; and the conjugal, parental, and filial ties are often dissevered for the most trivial causes. Yet the claims of relationship are distinctly recognised by custom and law. If one branch of a family becomes poor, the members of

the same family support him; if he be sold into slavery for debt, they often unite in furnishing the price of his redemption; if he dies, they bury him, and provide for his survivors; and if he is engaged in government service, the sovereign expects them to support him.

The laws facilitate and encourage, and sometimes even enforce such acts of kindness. In many instances, when a person is condemned to slavery, which is called being lost, the farantsa, a sort of public appraisers, put a nominal value on him, by the payment of which he can be redeemed by his relatives, but not by any other persons. Public odium frequently attends the non-performance of relative duties. But in such cases the previous disowning of a relative exonerates the party from all obligations to the disowned, just as the adoption of a child, or the marrying of a wife, involves all the claims of these relationships.

Friendships by compact are often faithful, lasting, and highly beneficial; very great kindness is also shown by parties not bound by formal compact, but merely by the ties of acquaintance and neighbourhood. Visiting, assisting in distress, lending and borrowing property and money, etc. are carried on much more commonly and freely than amongst neighbours or relatives in England. A kindness of heart in these things is called *malemy fanahy*, "tender disposition;" and a compliant, easy temper is called *mora fanahy*, "easy disposition." The former is always esteemed excellent, but the latter is capable of being excessive, and is then regarded as foolish and weak.

Hospitality, a few of the southern parts of the island perhaps excepted, is exercised with cheerfulness and promptitude, especially towards strangers. The general disposition of the Malagasy, when they are free from the influence of superstition or revengeful feelings, is also quiet and indifferent, rather than violent and savage. Selfishness is held in universal detestation; the word used to denote a selfish person is *sarotra*, "hard" or "difficult," and numerous tales are told to impress the minds of children with its abhorrent nature; in fact, they all admit that a selfish disposition in eating, drinking, etc. betraying a desire to monopolize the best to oneself, is disgusting.

Although there is no single word in the Madagascar language to signify lie-

rally "generosity," there is little difficulty in expressing the idea. *Mora*, "easy," is often used for generous, and so is *maleny fanahy*, as implying kind-heartedness as opposed to selfishness and avarice. Gratitude, also, has no appropriate word; yet, to thank, to return kindness for kindness, to give pleasure to the friend who relieves, etc. can be distinctly stated. Ingratitude is expressed by many strong metaphors, as *zanabaratra*, "son of a thunderbolt," probably alluding to the fable of a meteoric stone (thunderbolt) being carried very carefully by an aged female into her house, placed near the fire, and, there bursting, occasioning considerable injury to the old lady and her habitation. *Zana-dralambo*, "offspring of a wild boar," because it is affirmed that the young boar, when running by the side of its dam, continually gets before her and turns round to bite its parent. To be avaricious, is expressed by *mahihitra*, "grasping at," and sometimes by *antanamamba*, "in the hand of a crocodile." Such characters are regarded as odious, and are depreciated in the public proclamations.

Apathy, want of decision, and excessive indolence, characterize, very generally, the natives of Madagascar; and these, with the oppressions of the government, may be regarded as the fruitful sources of much of the extreme poverty that prevails in the country, and of many of the seasons of famine from which they suffer so severely. The mass of the people seem alike destitute of forethought and enterprise, and hence are unprepared for any failure of their crops, and unable to extricate themselves from any unforeseen calamity. Nothing is a greater impediment to the advancement of civilization than indolence; and nothing shows this more distinctly than the state of starvation in which the people are sometimes found, while a small amount of labour on the rich soil of the country around them would have supplied provision in abundance for a greatly augmented population. They are also far from being cleanly in their persons, and bathe but seldom.

Mr. Hastie states, that their passions are never violently excited; that they are not quick in avenging injuries, but cherish for a long time the desire of revenge for the most trifling insults, while they rejoice or exult in the distress of others. In obedience to their rulers, they are

influenced by fear, and, when gathered in large numbers, have been seen to look upon distress and death with perfect indifference; or if any feeling has been manifest, it has often been that of pleasure. The public executions exhibit more painfully, not only the absence of all the finer sensibilities of our nature, but the worse than brutalized state of the public mind. The unhappy victims of the treacherous ordeal of poisoned water, when declared guilty, are savagely dragged away, their bodies mutilated in a most horrid manner, or they are hurled down a fearful precipice, in the presence of multitudes of spectators, who look on without the least emotion of pity; while the children who have mingled with the crowd, amuse themselves by throwing stones at the lifeless bodies, which the dogs are rending to pieces.

Amidst so much that is opposed to every dictate of humanity, we notice with pleasure any indication of more generous feelings, and besides the sensibilities of this order already mentioned, few are more conspicuous than their love of country. With rare exceptions, they always leave their homes under great depression of spirits. It has been observed by Mr. Hastie, and others who have accompanied them on their military and other expeditions, that many become exceedingly melancholy if the period of return be delayed, and it is supposed, that some fall victims to their love of home. The Hovas often when setting out on a journey, take with them a small portion of their native earth, on which they often gaze when absent, and invoke their god that they may be permitted to return to restore it to the place from which it was taken. But when returning from a foreign land to their native island, or from a distant province to their own, every countenance beams with gladness; they seem to be strangers to fatigue, and seek, by singing and dancing on their way, to give vent to the fulness of their joy.

But even in these circumstances of grateful pleasure, their hardheartedness is strikingly exhibited. As the army approaches the capital, or the province of Ankova, many of the relatives of the soldiers hasten to meet them, travelling sometimes ten or twenty miles. When they meet, the cordial salutation and affectionate embrace, the rubbing of the feet of the returning soldier, presents a most

delightful scene; but in contrast with this may be seen the agonizing grief of those who now learn that a son, a brother, a husband, or a friend will return no more; they dishevel their hair, and give utterance to their distress in loud and mournful lamentations; but this excites no attention, and calls forth no kind sympathy, from those around them who are placed in happier circumstances.

Duplicity has been represented as the most conspicuous trait in the moral character of some of the races. It is remarkable that there are in the native language more words to express the various modes of deceiving than any other vice. The natives will invent the most specious pretences, and assume the most plausible air, to impose on the credulity of others, and ingratiate themselves into favour, while their real design is hid for weeks and months in their own bosoms. If they wish to make a request, they will preface it by so complimentary a speech, and so many thanks and blessings for a kindness yet to be done, and by such servile flattery for a virtue to be illustrated in the forthcoming gift, that one might imagine the whole nation a tribe of sycophants, or minions of a court. It is said to be often impossible to understand their object for an hour or more, as they will talk on the most apparently dissimilar subjects, but with visible restlessness, until, after all the windings of plausibility are travelled through, they hit as if by accident, on the point designed from the beginning. It is remarkable, that this characteristic equally distinguishes all public proceedings. Every petition to the sovereign is prefaced by a long prologue of flattery and servility, when the petition is made to close the address often in the following words: "And since this is finished, since the introduction is accomplished, we have to beg and petition," etc. etc. Every answer to a proclamation of the sovereign asking advice of the chieftains, is commenced by an eloquent but hackneyed detail of their sovereign's royal pedigree, supremacy, equity, etc. The sovereign also usually smooths the way for any unpalatable declaration by a little of the oil of flattery previously poured into the people's ears, calling them "the ancient soot," (which has adhered for generations to the house of their ancestors.) The native houses in Madagascar having no chimnies, and the door and window affording the only

means of escape for the smoke arising from the fires which are kindled on the floor of the house, the soot collects on the inner side of the roofs of their dwellings, where it is never disturbed by the people, who consider it a badge of honourable ancestry to have large quantities of soot hanging frequently in long black shreds, from the roof of their dwelling.

In bartering, every trader asks at least twice as much as he intends to take; and they never forget to boast of any instances of successful fraud. The best sign of genius in children is esteemed a quickness to deceive, overreach, and cheat. The people delight in fabulous tales, but in none so much or universally as in those that relate instances of successful deceit or fraud, though involving loss of life, as well as of property to the injured person. Lying is a common vice among all. To lie, is esteemed clever and pleasant, and more likely to serve one's purpose of interest or pleasure, than to tell truth. In short, their constant aim is, in business to swindle, in professed friendship to extort, and in mere conversation to exaggerate and fabricate. The laws regard the testimony of witnesses as a part of circumstantial evidence, to be opposed by contrary testimony or evidence. Lying has, in some cases, been enforced on the natives, it having been required of every Hova, when speaking with foreigners on political matters, to state the exact opposite to truth, on pain of punishment. So far has this been carried that it was once a serious and public complaint against Christianity, that it taught the people to scruple at telling lies, even to deceive their country's enemies.

Many of the Malagasy seem to think expediency determines the character of actions, and act as if they had no perception of what is vicious. The laws, publicly proclaimed, define vice; there are terms for depravity, guilt, error, etc.: and it appears that from these, and proverbial admonitory sayings, the people derive their ideas of what is right or wrong. But whilst the baneful influence of degeneracy of heart, and long familiarity with sin, have been such as to lead them to regard theft, and other acts of darker moral turpitude, as almost harmless, innumerable ceremonial observances are enjoined as duty, and the neglect of them is regarded as criminal.

Idolatry wherever it prevails, leads to this gross perversion of all correct moral sentiments and feelings, by ascribing all calamities to declared errors of conduct, such as eating certain herbs, sitting in a certain position, etc., and satisfying itself by endeavouring to remove all evil, and attain all good, by mere external observances, often absurd in themselves, and worse than useless to those who perform them.—*Ellis's Madagascar.*

STRUCTURE OF SHELLS.—No. V.

A LIST has recently been published of the specific gravities of living shells of different genera, from which it is manifest that their weight and strength are precisely adapted to the habits of the animals, by which they are respectively constructed. Thus we have interesting evidence of design; such as is yielded, indeed, in all careful examinations of the works of God, whether among ex-

isting or extinct forms of the animal creation.

It is worthy of remark, that, while the specific gravities of the land shells is generally greatest, the densities of the floating-marine shells are much the smallest. Nor can there be any doubt as to the design of this difference. The land shells have to contend with all changes of climate, and to resist the action of the atmosphere; while, at the same time, they are thin for the purpose of easy transport; their density is therefore greatest.

Others are of a different character. One of them has led Montgomery to the following beautiful description:

"Light as a flake of foam upon the wind,
Keel upwards, from the deep emerged a shell,
Shaped like the moon ere half her horn is fill'd:
Fraught with young life, it righted as it rose,
And mov'd at will along the yielding water.
The native pilot of this little bark
Put out a tier of oars on either side,
Spread to the wafting breeze a two-fold sail;
And mounted up, and glided down the billow
In happy freedom, pleas'd to feel the air,
And wander in the luxury of light."



The Nautilus.

The argonaut, nautilus, and creatures of like habits, require shells as light as may consist with the requisite strength; and, consequently, the relative specific gravity of such shells is small. The greatest observed density was that of a helix; the smallest, that of an argonaut. The shell of the ianthina, a floating

molluscous creature, is among the smallest densities; the specific gravity of all the land shells examined was greater than that of Carara marble.

Nor let it be overlooked, that while the mollusca are able to construct, they can also adorn their habitations. The skin of the little artist is full of ropes;

these contain colouring fluids, which, penetrating the calcareous substance before it is hardened, form its various tints. Nor does it appear that these pores occur at random. On the contrary, they are arranged in the skin of the mollusca as regularly as the spots on the leopard, or the stripes on the tiger; and the uniformity in the patterns of shells, is the consequence of the order in which the pores are placed in the mantle.

The providence of God is strikingly manifest in the colours of these creatures. The coverings of such as move readily from one situation to another, and are consequently able to choose the places of retreat, are generally varied with brilliant tints. Some exhibit the glowing colours of the rainbow, or those of the finest tulips, while a considerable number appear as if clothed in silver armour, as they walk under the shades of the madrepore. When the mollusca rarely move from the place of their abode, they are of the same colour as the sites they occupy, or the parti-coloured stones, or sea-weeds to which they cling.

Many shells exhibit, on several parts of their inner surface, a glistening or silvery appearance. It is caused by the peculiar thinness, transparency, and regular arrangement of the outer layers of the membrane, which, in conjunction with the particles of lime, enter into the formation of that part of the surface of the shell. This has been dignified by the name of "mother-of-pearl," from its being supposed to be the material of which pearls are formed. It is true, indeed, that pearls are actually composed of the same materials, and have the same kind of structure; but it has been proved that these bright colours are the effect of the parallel grooves that arise from the regular arrangement in the successive deposits of the shells. The same shining property may be given to shell lac, sealing wax, gum arabic, or fusible metal, by taking an accurate cast or impression of the surface of mother-of-pearl with any of these substances.

KILLARNEY.

THE great charm of Killarney, on the whole, is variety. In many other counties there are as lovely lakes, as picturesque islands, and much loftier mountains; but wherever they are found, there is a unity of character in the scenery. We say, that one place is wild, another

majestic, another beautiful, another picturesque, another pretty, and nothing more is required to describe the general aspect of the spot. But in Killarney we find grouped together, within the circuit of a moderate day's walk, almost every possible variety of the wild, the majestic, the beautiful, the picturesque, and the merely pretty. The beauties, too, are in themselves of the first class. Nothing can be more exquisite than Innesfallen, nothing more romantic than the walls of Mucross, nothing more majestically beautiful than the general aspect of the lower lake; nothing more wildly grand than that of the upper Mangerton, a dark, dreary, rounded mass, owing to its comparatively colossal size, forms, at a distance, a striking variety in the picture; and when that distance is lost,

"Which lends enchantment to the view,"

Turk, till then an insignificant hill, rears its steep and threatening head from a seemingly pathless forest, and flings its dark shadow, floating many a rood over the lake. All these things, and many more, which I have no room to particularize, are fine in themselves; but it is their juxtaposition, their grouping, to which the scene owes its high reputation.—*Ritchie.*

ADVANTAGES OF CHRISTIAN SOCIETY.

EVERY Christian is a king and priest unto God, and why not also a prophet to his brother? If a man will affect Christian society, and converse with spiritual persons, light will break in upon him, as flame from a sparkling fire. He that would gain knowledge should converse with the best company, or, as Solomon expresses it, "He that walketh with wise men shall be wise, but a companion of fools shall be destroyed." The daughters of Jerusalem were asked by the spouse for her beloved, when she was upon the pursuit after him to find him, "I charge you, O daughters of Jerusalem, if ye find my beloved, that ye tell him, that I am sick of love." In this way the meanest Christian may be of use. The lower plants have more of medicine in them than many taller shrubs. Apollos learned more of Christ from Priscilla, than from the apostles themselves. God often blesteth the weaker above the stronger means, to show that he is not tied to any.—*Charnock.*



Pope's Legate absolving the Parliament.

THE REIGN OF QUEEN MARY.

THE reign of Mary was the most disastrous of any in the annals of England, both from the sufferings of her protestant subjects, and the troubles and losses sustained by the nation at large. The cause is too plainly recorded to be mistaken. It was her determination, at all events and by every means in her power, to bring back popery, and to tolerate no other religion. The cruel proceedings against the protestants are the most prominent events of this reign; they have been faithfully related by those who were eye-witnesses, and recorded by writers who were living at the time. But these events were overruled for good, by causing a just abhorrence of a religion which acted upon such principles, and manifested such fruits. Whenever popery has endeavoured to regain the ascendancy, these facts have been brought forward, and the result has been salutary; England still remains a protestant nation. But the lapse of time, with the change of habits, causes the impression to be less vivid: it is now asserted, that the alterations in society have affected even popery, and that such events could not happen at the present day.

It is, therefore, important to refer to the general history of Mary's reign. This has been too much lost sight of, from the

horrid prominence of the persecutions which form the most striking events of that period. The sufferings of the protestants are recorded minutely in various publications; they must never be forgotten; but the reflecting reader will find a lesson from the polity of the unhappy queen, equally instructive as to the principles of popery, and perhaps more useful at the present day. The principles of popery are, and must be, unchanged. They teach the necessity of ruling the consciences of men, by forcing them to adopt a system of belief and action, directly opposed to the plain declarations of holy Scripture. This, it will be seen, was the aim of Mary; this, it cannot be denied, is the object of popery now; this, we learn from Scripture, will be its constant effort, till it is broken and consumed by the power of the Most High.

It will be seen that the cruelties inflicted on the protestants were the necessary results of such principles. If, then, the principles remain the same, have we reason to believe that the nature of men is so far changed, that the same causes would not produce similar results? Upon this, happily, we are not now called to speak; but we ought not to view with indifference any attempt to coerce or persecute under the guise of religion: whatever name or form such proceedings may assume, they are popery.

When the brief resistance to her accession had ended, Mary proceeded slowly towards London. Northumberland, and the other prisoners, were carried to the Tower, on July 25, 1553. On August 3, Mary made her entry at Aldgate, with a splendid train. On her arrival, she was met by her sister Elizabeth; they rode together to the Tower: the younger sister, handsome in person, and commanding in demeanour, appeared to advantage, contrasted with the diminutive figure, and forbidding aspect of Mary, who was, however, received by the people with loud acclamations. It is evident that whatever some recent historians may say, Henry and his family were popular with the English nation.

On her arrival, Mary released the four principal state prisoners of the last reign; the duke of Norfolk, the duchess of Somerset, Courtney, the son of the late marquis of Exeter, and Gardiner, the bishop of Winchester. She at once received the latter to her favour, as her prime minister. Her attachment to popery was soon shown. On August 8, the late king was buried at Westminster, when Cranmer used the protestant service for the burial of the dead. Mary, on the same day, caused a mass of requiem to be performed before her in the Tower, for the repose of his soul.

One of the first measures of her reign was the trial and condemnation of Northumberland, who was beheaded on August 22, with his son and four knights. The execution was delayed a few days, to allow him to manifest his return to popery. He probably thereby hoped to escape death, but was disappointed. In addition to a declaration against the Reformation, it is to be remarked that, when on the scaffold, he expressly declared that the act for which he died, the attempt to alter the succession, was not so much his own deed as that of others.

Several of the leading protestants had, by this time, been committed to the Tower; among them was Ridley, bishop of London, who was charged with treason for having preached a sermon at Paul's cross on one of the Sundays of queen Jane's reign, in which he stated, in strong terms, the evils that must ensue if Mary obtained the crown. Room was thus made for Bonner to return to the see of London. Bourne, his chaplain, preached before him at Paul's cross, on the 13th, extolling Bonner, and speaking in disparagement of the late king, and of the

Reformation. The audience, who well knew Bonner, and the cruelties of popery, were excited to a tumult by these statements; one proof among many others, that the mass of the people were not attached to their ancient superstitions, which popish historians falsely assert. Bradford, a protestant prebendary of St. Paul's, came forward to quiet the people, and enabled the preacher to take shelter in St. Paul's school. He was committed to the Tower on the unfounded charge that he had raised the tumult which, in fact, he quelled! But it was evident that every pretext would now be seized against the protestants.

Mary took an early opportunity to show her regard for popery. On August 18, she issued a proclamation, declaring that she was of the religion she had professed from her infancy; but she added, that none of her subjects should be compelled to adopt it, till that course was resolved on by common consent; meanwhile all preachers were forbidden to preach and explain Scripture without licence. From this document, it was evident that popery would be re-established, as soon as the parliament could be induced to consent.

The men of Suffolk at once sent a deputation to the queen, with an address reminding her of her promises; they were roughly treated, and told that the members must obey the head. One of them, a gentleman named Dobbe, was put in the pillory three times. Many other proceedings showed that papists would be favoured, while the protestants were put down; even those personally active in favour of Mary were set aside, while others, who had assisted Northumberland till the efforts of the protestants placed Mary in her present situation, were favoured, if they were papists.

Cranmer was ordered to keep at home. A false report being spread that he was ready to say mass, he wrote a declaration, stating his firm adherence to the protestant faith, offering that he, with Peter Martyr, would publicly defend the doctrines set forth in the late reign, and show that they were strictly in accordance with the word of God. Cranmer allowed bishop Scory to take a copy of this document; thus it got abroad; all the scribes, or public writers in London, were employed to meet the eagerness of the people to obtain copies. This declaration came forth at a seasonable

ment, Cranmer was thereby carried further than most expected his natural timidity would have allowed him to go, while so open a declaration against the queen's proceedings in religion, had particular force and power from one who so long resisted the attempt to set aside the succession. The queen's displeasure was excited against the archbishop; but he was enabled firmly to stand to the declaration he had made, only expressing regret that it had gone forth before it was quite finished, avowing his intention to have affixed it with his signature on the doors of St. Paul's. The council, on this bold avowal, caused him to be committed to the Tower, where others were continually sent; among them were several of the nobility; while other protestant ministers, finding themselves turned out of their cures, hastened to leave the kingdom. The first public celebration of mass, in the parish church, was in London, on August 23, at St. Nicholas, Coleabby. The priest who thus showed his haste to return to popery, had married during the late reign: he now sold his wife to a butcher. So notorious was his infamous conduct, that three weeks after this, he was publicly carted through London, the usual punishment for immoral characters, by order of the magistrates. The example was soon followed in other churches; some of the clergy returning to popery, others being intruded into the places of the ministers then in charge.

On October 1, the queen was solemnly crowned at Westminster, with the Romish ceremonial, when Gardiner took the place of the primate. Three days afterwards, the parliament was opened with a solemn mass. Considerable efforts had been made to secure the return of members who would be favourable to popery; but Mary's inclinations were far in advance of the wishes of her subjects. In the first weeks of her reign, she admitted a private agent of the pope to secret interviews, when she declared her anxiety to bring back her kingdom into absolute submission to the see of Rome; but insisted upon secrecy till her plans were more fully arranged. Her duplicity was such, that even after she had privately informed the pope that nothing should make her retain his title of supreme head of the church, she allowed this title to be proclaimed at her coronation, and even made use of the authority it gave her, to remove the pro-

testant bishops from their sees. The pope consented not to hurry her, but immediately appointed Pole to proceed to England as his legate, so soon as he could go safely. Mary also resolved to marry Philip, son of the emperor Charles v.; a union which at once flattered her vanity, and assured her of foreign aid to further her plans. For a few weeks she regarded Courtney with complacency, while the nation in general wished that she should marry a subject; but the ill conduct of that youth confirmed her in the views above stated; and, in contradiction to the wishes of Gardiner, who was well aware of the unpopularity of such a connexion, she engaged herself to the Spanish prince. Here then we see who were the leading characters that forwarded the restoration of popery in England, from regard to that faith: the emperor Charles v., the pope Julius III., Mary herself, Gardiner, and Cardinal Pole. The short interval of existence remaining to each of these characters, presents a singular coincidence, while we also see how vain are the devices of man against the Divine will.

In the early instructions of the pope to his legate, there are some expressions very important to be remembered. He states several reasons for caution in their proceedings; among them, that Mary obtained her throne by the favour of those who for the most part mortally hated the papacy. Also, that "the young sister" was popular with every one. Though very anxious that the Romish see should again exercise sway over England, the pope saw the difficulty of Mary's position at that time; he therefore consented to her dissimulation. It was the end of October before she wrote to Pole, and then stated that she could not venture to express her mind to him about obedience to the papacy, the people "being so alienated from the pope." The proceedings in parliament showed this. The proposition originally submitted was, to repeal all acts relative to religion, from the time when Henry shook off the papal yoke; which would at once have brought back popery with all its errors. But the parliament would not consent; all Mary could then obtain was the repeal of those acts which set aside her mother's marriage, and those passed in the reign of Edward concerning religion. This left matters as they stood at the decease of Henry VIII.,

with the exception of Mary's personal concerns. The parliament was dissolved in December, the members having expressed themselves against the queen's marriage with Philip. The kingdom was generally averse to this union; cardinal Pole himself, in his instructions to the agent he sent into England, plainly expresses his belief that the queen's peril at that juncture was greater than when Northumberland was in arms against her, and that there were few in England disposed to promote her views of reconciliation with Rome.

Such was Mary's position; but she was in iron hands. The pope and cardinal Pole were determined that she should proceed. They urged her onwards at all hazards. The emperor was willing to aid; Gardiner himself desired to bring back popery, but interposed that the matter might not be hurried forward too rapidly. As this parliament evidently was not disposed to go the lengths the queen desired, it was dissolved; considerable sums, partly advanced by the emperor, were expended in preparing for the assembling of a more subservient body.

During the sitting of the first parliament, a convocation of the clergy was also held. There less hesitation was manifested. Bonner presided in the upper house. The proceedings of the late reign were much blamed, which caused Philpot and others to come forward in defence of protestantism. A disputation was carried forward for some days, chiefly on transubstantiation, but the protestants were subdued by clamour. Dean Weston, who acted as prolocutor, closed the debate by this ominous declaration, "Ye have the word, but we have the sword." These proceedings, with the conduct of the queen, discouraged the protestants; while the papists, and all who desired the royal favour, became more bold in their proceedings, so that the mass was restored in many places long before the 20th of December, the time appointed by the parliament; while the objections raised by some protestants to these illegal proceedings, were made the pretext for committing many of them to prison on unfounded charges of sedition.

On November 13, Cranmer and lady Jane Grey and her husband, were tried at Guildhall, for high treason

against Mary. They all admitted their proceedings, but Cranmer pleaded that he had resisted the measure of excluding her from the throne, till it was declared lawful by the judges. They received sentence of death; but Mary did not venture to order it to be carried into execution. Jane and her husband had been mere tools for others. Cranmer had stood forward in defence of Mary in the two preceding reigns; but she now considered that she made a sufficient return, by not ordering him to suffer on a charge of treason, while she well knew he would be liable to death for heresy, from which charge she was resolved he should not escape. Gardiner also wished that the see of Canterbury should not be declared vacant, till he had taken measures, if possible, to prevent Pole from having that appointment.

The beginning of the year 1554 found the people of England in a very excited state: all who were attached to protestantism saw their hopes of toleration crushed by the restoration of the mass and the popish services, while their clergy were displaced by forms of law. Those who cared merely for political matters were alarmed at the prospect of the queen's Spanish marriage, with the restoration of the pope's authority. These measures would assuredly sooner or later destroy the independence of the nation, and bring in all the horrors of persecution. The lengths to which the queen was likely to proceed, had been shown by her conduct to her sister Elizabeth, towards whom the pope directed her jealous attention. Elizabeth's outward attachment to protestantism was well known; this made her popular with the English nation, though she was not known by any personal acts: her popularity, therefore, could only arise from the knowledge of her opinions. She refused to conform to popery for some time; but being threatened that her adherence to the truths taught in her brother's reign should be considered as manifestation of treason, she reluctantly agreed to attend the popish mass. This conformity, however, was merely outward profession: under her circumstances, we cannot be surprised, though we cannot commend such a dereliction of the truth from fear. Still it shows how different were the proceedings of Mary with reference to her sister, from those of her brother towards herself. She was allowed to follow her own views

of religion, but her conduct towards others was evidently guided by such maxims as these: no faith to be kept with heretics; no toleration to be allowed. Even after the compliance of Elizabeth, Mary treated her unkindly, and wished to have her excluded from the succession to the throne. Spies were placed about her, she was vigilantly watched; the Spanish ambassador urged that she should be imprisoned in the Tower.

Doubtless it was the interest as well as the duty of all not opposed to the queen's proceedings, to submit to her authority. The truly religious part of her subjects only wished to adhere firmly to their religious principles; but many included under the general denomination of protestants, were mainly actuated by political motives. Their leaders endeavoured to excite a general opposition to the Spanish marriage, now about to be concluded.

On January 22, Sir Thomas Wyatt appeared in arms at Rochester, with fifteen hundred followers. The duke of Norfolk was sent to suppress the insurrection, but a part of his force joined Wyatt, who marched towards London with a force estimated to be 15,000 men.

The queen showed her father's spirit at this trying juncture. She went to Guildhall on February 1, and addressed the citizens. This proceeding with the preparations made to support her cause, had such an effect on Wyatt's followers that the greater part left him; when he entered Southwark, he had only two thousand men with him. The French ambassador wrote to his court, that if Wyatt had reached the metropolis on February 1, the queen must have shut herself up in the Tower. But Wyatt's hopes were now at an end, though he determined on a desperate measure; to march by night to Kingston, cross the Thames, and then hasten to Westminster, hoping to secure the queen by an unexpected attack on the palace at day-break. A sufficient force had been collected to meet him, and he delayed his march by stopping to repair the carriage of a piece of artillery, so that he did not arrive at the time his friends expected. The queen's forces allowed him to pass the Haymarket after a short contest. He reached Ludgate, which he found closed against his little band, now reduced to eighty, and being encom-

passed by a considerable force he surrendered. Simultaneous attempts at insurrection had been made in the mid-land counties by the duke of Suffolk and others, but they were easily suppressed.

This attempt of Wyatt forwarded the plans of the papists. The queen was now stimulated to give full scope to the cruelty of spirit fostered by the dark and gloomy superstitions of Rome. Lady Jane Grey and her husband were the first victims. They were beheaded on February 12, after an ineffectual attempt to induce lady Jane to profess herself a convert to popery. It was a dismal week in London. The queen acted up to the exhortation given her by Gardiner, in his sermon on Sunday, to act with the utmost severity. Gibbets were set up in the streets of London; on the Wednesday forty-eight of Wyatt's followers were executed, some of them being quartered while yet alive. Many others also suffered. The French ambassador states that above four hundred had been hanged, besides fifty of the leaders. The emperor approved and urged on this severity. Even if the number of sufferers has been exaggerated, it exceeded any list of executions that can be pointed out in the reigns of Henry and Elizabeth. The duke of Suffolk was beheaded a few days afterwards. Wyatt was executed on April 11.

An attempt was made to involve Elizabeth in this plot, but it failed. Wyatt at first expressed himself so as to imply that she had been aware of his proceedings, but afterwards fully declared her innocence. She was, however, taken from a bed of sickness, brought to London at the hazard of her life, kept a close prisoner at court for a fortnight; and when the attempt to involve her with the conspirators had failed, she was sent to the Tower. Her feelings were expressed in the words she uttered, when landed at the Traitor's Gate after a dangerous passage through the fall of London bridge. "Here lands as true a subject, being prisoner, as ever landed at these stairs. Before thee, O God, I speak it, having no other friends but thee alone." Mary would have proceeded to severe measures; Charles v. urged that Elizabeth should be put to death, if plausible grounds for her condemnation could be found; or, if this could not be done, he recom-

mended that she should be sent a prisoner to his court at Brussels. But the lords of the queen's council remembered that Elizabeth was next heir to the throne, and cautioned one another only to use such dealing as they might answer to hereafter. Nor did Mary countenance any attempt at illegal violence, though she did not hesitate to endeavour to find her sister guilty on any charge that might be considered treason.

Elizabeth remained some time in the Tower, in a state of anxious suspense. But the persecuting queen appears to have been under still deeper feelings of anxiety. She summoned another parliament, which was ordered to meet at Oxford, on account of the dissatisfaction of the Londoners. Fifteen hundred horse, besides artillery and foot, were levied to attend her; while, in addition to her usual guards, more than twenty gentlemen slept in the hall near her apartment. These precautions were deemed necessary, though the insurrection had been wholly suppressed, and the leaders either put to death or banished. Yet popish writers tell us that Mary was popular on account of her religion!

The parliament had been ordered to assemble at Oxford, but this intention was changed; it met at Westminster in April. Spanish gold had helped to procure a more subservient assemblage. The marriage with Philip was approved, but the queen was refused permission to dispose of the succession as she should see fit; it was expressly provided that Philip should have no right or claim to the throne of England, though the title of king was allowed him during the queen's life. An attempt to revive the old laws against heresy, in all their former force, also failed.

The arbitrary proceedings of the queen and Gardiner were checked about this time, by the courage of a London jury. Sir Nicholas Throckmorton, an active protestant, was charged with having recommended several persons to take part with Wyatt. He defended himself with much ability and boldness; and ventured to speak against the queen's proposed marriage. The jury acquitted him, a circumstance very rare in those days, when the accusation was for high treason. The chief justice Bromley desired them to alter their verdict, but they persisted in acquitting Sir Nicholas, upon which they were ordered into custody, though

they were highly respectable citizens of London. After being some months in prison, four implored pardon. The remaining eight were brought before Gardiner in the Star-chamber court, where they still adhered to their verdict, declaring they had acted according to their consciences. They were then sentenced to pay ruinous fines, which, being more than they possessed, were mitigated to amounts from sixty to two hundred pounds each. These sums were equal in value to twelve or fifteen times the amount in the present day. Such a direct interference with the legal administration of justice, made many afraid to withstand the tyrannical proceedings of the queen; but it increased the abhorrence in which Mary was held, and caused serious alarm to reflecting minds. Another instance of injustice was shown in the treatment of Sir James Hales. That upright judge firmly refused to sign the instrument by which the late king sought to alter the succession. For this he deserved Mary's especial favour; but soon after her accession, being in his circuit, a popish priest was brought before him on an information, and fined for saying mass, an illegal act in the days of king Edward, whose law had not then been repealed. This was brought against judge Hales; he was imprisoned, and threatened, till he consented to conform to popery. Being then released, he returned home, but was overcome by despair on reflecting upon his apostasy. Shortly after, he was found drowned in a shallow stream, having unhappily given way to the suggestions of the evil one; but there was no doubt that his mental powers had been shaken by the severity exercised towards him.

The efforts to find grounds for charges against the princess Elizabeth having failed, she was removed in May to Woodstock, where she was closely guarded. Foxe gives a minute account of the treatment she received. It was such, that one day, while walking in the garden, hearing a milk-maid singing merrily, she expressed an earnest wish to change places with her. She had severe trials to endure; but they were overruled for good. They increased the firmness of her character, and made popery hateful to her.

In April a disputation was held at Oxford, when Cranmer, Ridley, and Latimer argued manfully against the absurd doctrine of transubstantiation,

which teaches that when the priest pronounces four Latin words, the wafer, or bread used in the mass, is changed into the body and blood of Christ, and even includes the soul and bones of the blessed Saviour! This is the doctrine of the church of Rome, relative to the elements of the Lord's supper! Cranmer and his associates were told that they had been overcome; and on their still refusing to admit the doctrines of popery on this subject, they were pronounced obstinate heretics. A similar scene was to have been acted at Cambridge; but the protestant bishops and clergy selected for that purpose, drew up a statement of the doctrines they held, and refused to dispute, except in writing, on account of the falsehoods the papists had circulated respecting the proceedings at Oxford.

The public display of popish ceremonies increased; also the general dislike to the queen's proceedings. So many left the country, that in April the French ambassador wrote, that half the kingdom seemed in motion to proceed to France. A few days later he wrote that "nothing was commonly spoken of, but of gentlemen stealing over into France." Those esteemed themselves best off who could sell their property, and pass thither without danger. The people that remained, were evidently inclined to proceed to great lengths to prevent the Spanish marriage.

Mary expected Philip with much eagerness, while her subjects manifested their dislike to the union. A fleet was prepared to escort the Spanish prince up the English channel; but the seamen showed such discontent, even threatening to deliver up Philip to the French, that the admiral was ordered to reduce the number of ships, and dismiss the most refractory sailors. Philip arrived in England about July 20, was married at Winchester, and made his public entry into London a few days afterwards. A painter having drawn, for a pageant, Henry VIII. with a book in his hand, on which was written, "The word of God," was severely threatened by Gardiner, and was ordered to efface it; being affrighted, he obeyed so thoroughly as to take out part of the king's hand also.

The arrival of Philip caused some changes. He obtained the release of several prisoners, and sought to make himself popular by procuring more favourable treatment for the princess

Elizabeth. This suited his own interests; she was next heir to the throne, if Mary had no children; while, if she were put aside, Mary queen of Scots, and also queen of France, would succeed, which would prove a serious event for Spain, by increasing the French power. The Spaniards frequently came into collision with the English populace during the autumn; some of the most violent on both sides were punished. The general behaviour of Philip did not conciliate his new subjects: he was haughty, reserved, and desirous of absolute power. The persecution of the protestants still continued; but as yet it was chiefly on pretence of treason and sedition.

A parliament, favourable to the queen's views, was procured. The first act removed the attainder of cardinal Pole, who had been for some time in Flanders, waiting to return to England. He arrived on November 24. Three days after, there was a special sitting of the parliament. Philip sat on the right hand of the queen, next to him was Pole, wearing his cardinal's hat. He addressed the assembly at considerable length, stating the desire of the pope to receive the nation again into favour, upon their submission, and that he was willing to impart to them his blessing.

There was some debate upon this subject; but only one member, Sir Ralph Bagnal, stood firmly to his principles. The rest besought the queen to intercede that the nation might be absolved; and on the following day the legate made a long oration upon the unity of the church, urged the favours formerly bestowed upon the English nation, enjoined them to repeal all laws against popery, and granted full absolution to the members kneeling before him. At the same time, it was reported that the queen was with child, solemn processions and services were performed; but this was, as Strype expresses it, either a mistake or a deceit: however, it strengthened the papists for the present.

The parliament next proceeded to restore popery. An act was passed repealing all laws and proceedings against the papacy, since the year 1529. A clause, however, was inserted, confirming the possession of the abbey lands to those persons by whom they were held. The pope desired that they should be eventually restored; but the possessors were, of course, unwilling to yield, and to have attempted to compel the

restitution, would have effectually prevented the reconciliation with Rome.

Pole therefore granted a dispensation, allowing the "detainers" of these lands and goods still to possess them; a word which plainly showed that the claim was only suffered to remain dormant for a time; it was not given up. Sir William Petre, then secretary of state, aware of the intentions of the pope, the next year got a special bull, confirming to him the church lands he had bought. If restitution had been enforced, this might easily have been revoked or cancelled by some other infallible head of the church.

The next act revived the old laws against heretics and lollards. Hereby the cognizance of opinions in religion was again fully committed to the clergy: they could by their own authority arrest, imprison, or condemn, merely for matters of religious belief. Although the parliament thus complied with the queen's desires on the subject of religion, it was less tractable in other matters. The members steadily resisted giving Philip regal power, refusing also to aid the emperor against the French king; while the queen desired that Philip should be declared presumptive heir to the crown.

The parliament rose, January 16, 1555, when public rejoicings were ordered, for that "the realm was restored again unto God's favour, and the unity of the mother holy church." The bigoted papists rejoiced; but the larger portion of the nation looked on with fearful apprehensions of what was to come. Even praying that the queen's heart might be turned from idolatry to the true faith was considered as treason, and those who used such expressions were to be hanged, drawn, and quartered. Many Romish books were printed and circulated, while the use of the English Bible was forbidden.

PRINCIPLES.

Addressed to Young Men.

I. I would first solicit your attention to the importance of being early established in right moral principles.

1. They are your only protection against the exposures incident to the passions and temptations of youth.—To be without them, in a world like this, is like being out at sea without either

compass, rudder, or anchor. You have no sure knowledge of the right way; or if you had, you have nothing to guide you in it; and if, in your doubts and perils, you would at any time find a haven, you have nothing to serve you as an anchor, sure and steadfast. You are thus continually exposed to be "tossed to and fro, and carried about with every wind." How many millions of youths, from not being early established in right principles, have been overcome by temptations, and drawn into the vortex of dissipation and ruin!

2. They are your only sure protection against the insinuations of error.—Ever since the father of lies deceived our common mother, and imposed falsehood upon our race, the world has been filled with lies; and men have never been wanting to believe and to teach them. Unless, therefore, your minds are early preoccupied with truth and sound principles, they will be perfectly and perhaps fatally exposed to error.

Unless the mental soil is implanted with good seed, thorns and thistles and weeds will shoot up. You will always be very liable to imposition. Everything that looks plausible and that gratifies your feelings, you will be likely to embrace for truth, and to stake your eternal interests upon it; so exposed will you be to the "sleight of men and cunning craftiness, whereby they lie in wait to deceive."

3. They will secure to you the confidence of good men.—This is of very great moment to you. To have the confidence and esteem of the truly pious, is the best earthly inheritance you can have. But be assured you cannot secure it without some established principles. Men must know where to find you, and what to expect from you. And the higher your principles rise, and the more firmly they are maintained, the more will you secure the confidence of those whose confidence is of most value. "He that walketh with wise men shall be wise."

4. It is important to establish right principles while young, so as to secure their growth. The principles of belief and conduct formed in youth, gain constant strength by age and use; they grow with our growth, and strengthen with our strength. The man who waits till middle age before he establishes his principles, is like the husbandman who should wait till midsummer before he

plants his corn. He then wants the previous growth.

When a man comes to be exposed to the severe trials and the strong temptations of the world, as they beset him in the midst of life and business, he needs the protection of principles early formed and faithfully nurtured to maturity. Principles but just then implanted, or just beginning to sprout, are not adequate to his necessities. They are very liable to be broken down and destroyed. You cannot trust to principles formed late in life, as you can to those formed early.

5. It is extremely difficult to establish principles in mature age, after associations, prejudices, and habits are formed. If we speak of principles as matters of doctrinal belief, all your cherished associations and prejudices are then to be surmounted; if we speak of them as rules of conduct, all your previous habits are then to be corrected. This is no easy task. A large portion of the strength of your remaining days, must then be spent in counteracting the evil tendencies of your previous principles. Indeed, so powerful and abiding is the influence of early principles, and so disastrous the want of them, that in most and perhaps all cases in which men have risen to eminence, they have done it upon the strength of principles early formed.

6. But the strongest reason for establishing yourself early in right principles, remains to be mentioned. God commands it. And he has therewith associated his blessing, which is the only perfect security either for this life or for that which is to come. To believe what is morally true, and to act upon principles morally right, is to possess the character which God approves, and to be prepared both for earth and heaven.

Become thus early established in right principles, and you will never be turned out of the way by the delusions of error, the solicitations of pleasure, or the impulses of blind passion; your defence will be the munition of rocks. In the agitations of life, the convulsions of death, and the retributions of eternity, you will fear no evil, for God will be with you.

II. Let us now proceed to inquire what right principles are, and how they may be known and formed. All sound morality has its foundation in religion;

but I shall give to religion hereafter a more full and distinct consideration.

The principles of belief are of numerous grades, from gross atheism to sound religion; and the principles of conduct also graduate in like manner. The first elevation is only a refinement upon the pleasures of the brutes. It implies the exercise of intellect, but it is exerted merely for the purpose of enhancing and prolonging the pleasures of sensuality. There are in all communities some men who, as is said of a great portion of the French nation, adopt no higher principle of action, than just to secure to themselves and to the objects of their favour the highest and longest continued sensual gratifications.

The next elevation carries us just above the mere pleasures of sensuality, to the lower gratifications of vanity. Here we find the fop and the dandy, whose character is manufactured by the tailor and the dancing master, and who is never so much in his glory, as when exhibiting his person, dress, and manners, to the best advantage.

In the same company we find those trifling and vain spirits of the other sex, who spend so many hours in gazing with transport upon the mirror, at what they suppose to be beauty of form, complexion, and dress; and who are never so much delighted as when they can exhibit their fancied charms to the highest admiration; while others, conscious of not possessing their personal attractions, display their vanity in aping the manners and aspiring to the society of the more fashionable circles.

Vanity of person, dress, equipage, furniture, station, rank, name, and distinction, constitutes the ruling passion and the controlling principle of many weak minds of each sex and of every age.

Not far from this grade, we find those who adopt what is called the principle of honour. As honour is a relative term, the standard of right conduct of course varies with the character of the communities in which they reside. It is the governing principle of such men to do what public sentiment declares to be honourable. Hence in some communities, their external morality will be very high; in others, where the standard of morality is lower, they will desert the house of God, and indulge in walks and rides of pleasure upon the Sabbath; in others, they will fight

duels; in others, mete out to their enemies retaliation and revenge, according to the rule of a heathen writer, that it is equally dishonourable to be outdone by a friend in conferring friendship, and by an enemy in inflicting injury; in others, they will practise gambling, swindling, drunkenness, and seduction; in others, they will perhaps do all these things, because they are considered honourable, and perhaps more honourable than any other conduct in their place.

We next find those who are swayed by the deeper and more serious ambition of wealth, intellectual eminence, conquest and glory, rank and office, dignity and power. In these things they place their highest good; it is of course their principle of action to make all other interests subordinate to their acquisition and enjoyment. They may be fair and respectable men, in a worldly and loose sense; but do you not clearly see, that every principle of action founded upon a supreme regard to those inferior objects, must be radically wrong? Does it not violate the highest relations and most solemn obligations of our being? Does it not set aside that great law of supreme regard to God and of benevolence towards his creatures, which is equally a law of our moral constitution and of revealed truth? Is this world ever to be redeemed from its sins and sorrows, and heaven ever to be peopled with righteousness and joy, by characters formed upon such a principle as this?

Come we then to the positive question, What are the principles of sound morality? I answer, they are such only as recognize that first great moral truth, that we are accountable, and that we ought to render supreme homage to the Supreme Being, and conduct ourselves benevolently towards all his creatures.

That you may know more fully how to render supreme homage to God, and to conduct yourself benevolently towards men, you are furnished with a moral code, called the decalogue or ten commandments.

Adopt each of them as a specific principle or rule of conduct.

The first forbids you to love any other object before God. Always make it a principle then, under all circumstances, to give to God your supreme affections, and to use all necessary means of securing them to him.

The second forbids you to worship

any other object in place of God. Make it your principle, then, never to allow a regard to men, or custom, or gold, or honour, or any other object, to supplant that homage, or prevent that worship, which is due to God.

The third forbids you to take the name of God in vain. Adopt the principle, then, never, on any occasion or pretence, to treat God or religion with irreverence. Let every species and degree of profanity, be for ever exiled from your heart and lips.

The fourth instructs you to keep the sabbath holy. Make it your principle, then, never to violate the sacredness of that day. Let not business, pleasure, indolence, nor irreligious society, tempt you to divert any portion of the sabbath from the sacred duties to which God has assigned it. Give it all strictly, conscientiously, habitually, to a religious purpose.

The fifth requires you to honour your parents. Make it your rule, then, always to conduct yourself towards them with filial affection, respect, obedience; never to do anything which would grieve or dishonour them, and ever to do that which shall make you their honour and their joy.

The sixth forbids you to kill. And "he that hateth his brother is a murderer." Make it your principle, then, never to cherish hatred, ill-will, anger, revenge, envy, or any other feeling which would seek his harm, towards a fellow being; neither to pursue any kind of business or amusement, which tends to injure his property, health, character, or usefulness.

The seventh forbids all impurity. Make it your principle, then, to disallow every unchaste affection, purpose, and action; and, as far as possible, to avoid whatever might lead to, or occasion it.

The eighth forbids theft: a crime so severely condemned by civil law and public sentiment in all Christian countries, that you may seem in little danger of committing it. But remember that fraud, deception, overreaching, or any other means by which what were honestly another's is brought into your own hands, is a moral theft. Make it your principle, then, to conduct yourself in strict honesty towards all men, and never through any means or pretence, to get or possess what were in justice the property of another.

The ninth forbids false witness. An

iniquity loudly condemned both by the voice of law and of public sentiment, in all civilized countries; but still of very extensive occurrence. What a loathsome exhibition of this immorality is made in our civil courts! And how extensively it finds a place in the social circle, and around the domestic hearth! Adopt the principle, then, never to testify what you do not know to be strictly true; and never to speak even truth against any one, unless the good of the community requires it.

The tenth forbids covetousness: an iniquity odious in the eyes of all, and yet one of the most prevalent and tenacious maladies of the human heart. Adopt the principle, then, always to be satisfied with the portion assigned you by Providence; never to indulge the incipient risings of desire for what does not belong to you; and to rejoice in the welfare of others, as well as in your own.

These are the great principles of sound morality, handed down to our world from heaven, to regulate our conduct towards God and towards each other. They are immutably perfect and imperishable. The philosophy, science, arts, customs, and all the human institutions of the day in which these principles were presented to our race by God, have changed or passed away; but these remain precisely as they were, almost four thousand years ago. Not a jot or tittle of them has changed or failed; and exactly such they will continue, as long as the sun and the moon shall endure. Wherever they have been most known and obeyed, men have been most elevated in character and most happy. They are the everlasting principles of sound morality. Adopt them by the grace of God; direct your conduct by them; and you will be sure of forming a righteous character. "Wherewith shall a young man cleanse his way?" By taking heed thereto according to thy word. The commandment of the Lord is pure, enlightening the eyes."—*Hubbard Winslow.*

gin to blow our bubbles early in childhood, and we keep it up, with little intermission, to old age.

With what delight does the young urchin gaze on the glittering globe of soap and water that he has fairly launched into the air, while standing on a four-foot wall! There it goes! mounting up high with the breeze that blows, and again descending low. One moment as high as the house, and at another almost touching the ground. Onward! onward it holds its course, escaping every danger, till, at last, it bursts as it strikes against the edge of a tombstone in an adjoining churchyard.

The bubbles of our after years, too, bear a strong family likeness to those of our childhood. Some burst as soon as blown. Some vanish suddenly in the air; and if any of them mount over the churchyard wall, they are sure to disappear amid the tombs.

"Wishing" is a losing game to all who play at it; and yet who is there that altogether refrains? I never heard but of one man, who could say, "I have learned, in whatsoever state I am, therewith to be content," Phil. iv. 11.

Let us take a stripling from among the many who are, at this moment, banquetting on the airy food of future greatness; who are, in other words, engaged in bubble blowing, and enter for a moment into his golden dreams. It is true he may be poor; but the Rothschilds were not always rich, though at last they amassed millions. He has heard of Whittington, a poor friendless lad, quitting London with his bundle in his hand, and turning back again to wealth and renown, beckoned by the bells ringing out musically, as he fancied, the words,

"Turn again, Whittington,
Thrice Lord Mayor of London."

Why, it is very possible that, some day, he may be as great a man as Whittington, who had only a cat with which to make his fortune. Not that he has at present any very bright prospects before him in real life; but that only renders the more bright the vision of his fancy.

Well, then, it is a settled thing with him that he will be a merchant, and sail the seas in a ship of his own, carrying out beads to barter with Africans for ivory and ostrich feathers; and bales of cloth to exchange for gold. There is no preventing his future prosperity; he will

OLD HUMPHREY ON THE GAY DREAMS OF YOUTH.

It is said that "men are but children fully grown;" and if I were to be asked in what childish amusements they indulge more than another, I would say, in the game of bubble blowing! We be-

soon become rich, in his own imagination, and ride in a coach and six!

And now the bubble is at its height! Poor fellow! what a pity that he cannot keep it in the air! Alas! down it must come, breaking against the very ground. The poor lad works at a trade, marries early, has a large family; his health fails him, his friends forsake him; want springs upon him like an armed man, he becomes sick and infirm, and he receives pay from the parish.

Or, suppose his youthful dream to be of another kind: his bubble, though equally frail with that I have already blown for him, may take a different direction. He is studious and fond of books, and it may be that he is poetical. Say that Chevy Chase, or the ballad of the Children in the Wood, first lures him to the flowery pathways of poesy. He reads, grows abstracted and imaginative, and "mutters his wayward fancies" as he goes. Goldsmith wins him, Cowper and Montgomery delight him, Gray fires him, and Byron works him up almost to frenzy, and it is well if not to moral evil. Like a ship with no ballast and much sail, he pursues his course. He yearns for an earthly immortality. There have been Shakespeares, and Miltons, and Ossians, and Homers! Why may there not be again? What a delightful thing to publish a volume of unrivalled poetry; to be lauded by reviewers, to be sought by booksellers, to be courted by the great, and be highly estimated by the world!

Thus he goes on wasting his life in unprofitable dreams; but, see! the bubble bursts at last. He has feasted his mind, and famished his body; unable to conform to the common-place usages of life, or to perform its duties, he is crushed by trouble. With an intellect superior to those around him, he is the proverb of the wise, and the butt of the foolish; and, perhaps, ends his days in a lunatic asylum. There may be many, whose sober habits and reflections may think this picture overdrawn; I have some reason to think the contrary.

Or, perhaps, he has read books of travels and wondrous adventures by sea and land, and is resolved to travel; why should not he, as well as others, do something wonderful?—ascend Mont Blanc, go down the crater of Vesuvius, and measure the Pyramids! How delightful, after wandering in strange lands, like Mungo Park, encountering

lions in the desert, like Campbell; and delving into the mummy pits of Egypt, like Belzoni, to return home with the real Indian tomahawks, bows and arrows, and scalping knives; with snakes from Africa, fishing tackle from the South Seas, birds of paradise and humming birds from the East; and monkeys and macaws from the west!

This is a golden dream in which his fancy indulges in his waking hours. His native land is too contracted for his ardent spirit; he longs for perils and toil, he thirsts for strange adventures, and after all, perhaps, is put apprentice to a tailor, or a weaver, passing his days on a shop-board of six feet by three, or growing old in flinging the shuttle and plying the loom in the back garret of some miserable dwelling. What a glittering bubble has here burst! What a gay dream has passed away! and yet who shall venture to affirm that a thousand such occurrences as these have not taken place in common life?

But his dream may have been yet of a different kind. The stripling may have heard the stormy music of the rattling drum, and gazed upon the gay attire of the recruiting serjeant. He may have "heard of battles," and been fired with the love of victory and fame.

Strange it is, that when the would-be warrior sees before him the prancing war horse, and the bannered host, that he cannot see the agonies of the dying, and the mangled heaps of slain! Strange, that when he hears, in imagination, the neigh of the charger, the clangour of the brazen-throated trumpet, and the roar of cannon, that he cannot hear the agonizing groans of the wounded soldiers, nor the heart-rending wails of the widow and the fatherless! Yet so it is! selfishness, and sin, and carnage, are crowned with glory.

But the stripling will blow his bubble. He ponders the page that sets forth the victories of Cressy and of Agincourt, of Blenheim and of Waterloo. He gazes on the marble monuments of renowned heroes, and becomes a soldier! nay, more; he is famed for courage, rises in rank, and his fondest wishes are realized.

But are these gay dreams less vain because they have been partly fulfilled? The stripling has become a hero, with a scar on his forehead, and a pair of epaulettes on his shoulders. But there is something yet that remains to be told:

besides these things, he has a galling wound that the surgeons have pronounced incurable; and a ball in his body that annoys him, yet cannot be dislodged! And when alone in the midnight hour, he heaves a sigh, somewhat in doubt whether he should not have led a more useful life in pursuing peace, than in following war; in being a preserver, rather than a destroyer of his species.

Have I said enough? Old Humphrey has been a blower of bubbles, a dreamer of dreams, through the better part of his days; let him then run his length on the gay dreams of youth.

But he may be musical; and his fanciful reveries on humanity may be musical too. The halfpenny whistle, the penny trumpet, and the sixpenny drum of childhood, have given way to the fife, the flute, the flagelet, and the fiddle. He studies the gamut, plays solos when alone, duets when with a friend, and talks about Wragge, and Nicholson, and Cramer. On he goes, afflicting the neighbourhood with the dissonance of his unmastered instruments, till he really becomes a decent performer. He now plays a Nicholson flute, and a Cremona violin, besides which he has made some progress on the violoncello, and can blow a clear and sonorous blast or two on the keyed bugle.

But is he satisfied? No, there is no point of satisfaction in music, more than in other things. Could he pour forth the full diapason of the pealing organ; were the harmonious crash of the whole orchestra under his control, he would not, he could not, rest satisfied; he must blow his bubble; he would compose like Handel, play like Purkis, and outrival the wondrous performance of Paganini.

This is the beginning, or rather the noon-day of his dreamy delight. But what is its end? He joins some musical society, is led into company, neglects his business, spends more than he gets, sinks into poverty, and in his old age is found playing a fiddle to the drunkards in a pot house, for what pence he can obtain, or spending his breath on a cracked clarionet, a mendicant performing in the public streets.

Or, suppose him to have read the adventures of Robinson Crusoe, and the voyages of captain Cook, and to have fallen in love with the sea. He has met a jack tar in his holiday clothes, and gazed with admiration on his long-quar-

tered shoes, blue jacket, and snow white trowsers. He has seen him pull out of his pocket, carelessly, a handful of copper, silver, gold, and pig-tail tobacco. "Oh it is a fine thing to be a sailor!" thinks he, "to wear clean clothes, to play the fiddle, to dance on the deck, and to have plenty of grog and prize money! Nothing in the world like being a sailor!"

And now comes thronging in his midnight dream, a ship's crew of light-hearted seamen, a jovial band of Jack Tars. He hears their songs, he sees them in their well-rigged ship, ploughing through the foaming waves, with dolphins, and porpoises, and flying fish around them, and a clear blue sky above their heads.

He goes on blowing his bubbles till he has had enough of stormy petrels, glittering icebergs, sharks, and shore-crabs, whales, and walruses; sea weed, sword fish, and coral rocks; and then wrecks himself on an uninhabited island, that he may give, on his return home, a wonderful account of his dangers and his toils.

If he were the king of mighty Babylon departed, surrounded with his wise men, Chaldeans, soothsayers, and astrologers, they would give him, no doubt, a goodly interpretation of his dreams; but being only a poor friendless lad, he cannot hope for that advantage. No matter! when twenty summers and winters have rolled over him, he finds himself as far as ever from the ocean, retailing snuff and tobacco in a country village.

Such are the gay dreams of youth, and most of us have indulged in one or other of them. I know one who has indulged in them all; ay, more than all! and what was the end of his sunny visions? What has become of the gleams of glory that dazzled his youthful fancy in by-gone days? Let the tear that has fallen on the paper, on which I note down these observations, be his reply. The bubbles of his childhood are burst; the fond dreams of his youth and his manhood are passed away; he has seen the hollowness of them all, and has been made willing to exchange the empty dreams of time for the realities of eternity.

If he knows any thing of his own heart, there is nothing in the honours, the riches, and the wisdom of this world, that for one moment he would put in comparison with the well-grounded hope

of everlasting life. Put together all the renown that mankind has to bestow; pile up the crowns and sceptres of the earth; heap high its gold, its costly gems and glittering diadems, and they will be as dust in the balance, if weighed against the hope of eternal life through Christ Jesus our Lord.

CORN AND GRAIN.

THE greater number of the plants denominated corn, are classed by botanists in the extensive group of the grasses, (*Gramineæ*), which includes many of the most important productions of the vegetable creation. The grasses, indeed, taken in the botanical sense of the term, are, in a great measure, indispensable, directly or indirectly, to human subsistence; directly, in the state of grain or bread corn; and indirectly, as provender or pasture for domestic animals.

Wheat (*Triticum hybernum*) stands at the head of the cereal grasses (*Cerealìa*) for its superior productiveness and paramount utility. It is a species consisting of many varieties of a genus of grasses, several of them very common natives of Britain. Amongst these is what may be termed creeping wheat; (*Triticum repens*;) but this is better known by the name of couch or quitch; and so far from being useful, like the cultivated species, it is one of the most troublesome weeds in fields and gardens; it being almost impossible to extirpate it from ground which it infests. It would be singular if this annoying weed, on the eradication of which agriculturists and gardeners have laid out thousands of pounds, should, in process of time, and by the advance of human art, come at last to supersede the annual sorts of wheat now cultivated. How chimerical soever this may at first appear, it is by no means impossible, and is even not a little probable, considering the very extraordinary effects recently produced by crossing, and the facility with which the couch could be crossed with the annual cultivated wheat, from its being of the same genus.

The origin of the cultivated wheat is involved in obscurity. It has no where been found in a wild state, at least botanists have not been able to identify any of the wild species with the cultivated varieties. The chief evidence for its very high antiquity is the remarkable

circumstance of grains having been found enclosed with the mummies of Egypt, which, when sown by the French botanists, produced wheat of a similar kind to that now cultivated in the Levant; known under the name of Syrian wheat, and characterized by having more rows of grains on the ear than the sorts usually cultivated in this country.

It is worthy of notice, that though wheat grows in Egypt and Barbary, countries comparatively hot, it has not succeeded in the West Indies, even in rich soils, apparently well adapted for its cultivation. One reason for the failure may be, that the seed corn, sown in the West Indies, was procured from England, where, according to a well-known law of vegetation, the wheat had become accustomed to a cold climate, and could not, therefore, agree with the temperature of the tropics. It is highly probable, indeed, that if the seed wheat had been procured from Egypt, or Barbary, or even from South Carolina, or Georgia, it would have succeeded, and might even have improved in quality by the change.

Besides, the couch, or creeping wheat, there is a sort (*Triticum maritimum*) not very dissimilar in appearance, which grows on sandy places by the sea shore, near the high water mark. If this could be successfully crossed with the cultivated wheat, a sort might perhaps be produced, which would thrive in sandy maritime soils, where no other crop of any value could be grown. Rye, indeed, will grow in such situations; but not by any means so well as a plant which naturally grows there, and in no other species of soil. It would be richly worth the attention of scientific botanists to undertake experiments in such crossings, which might probably lead to results so very important.

But though wheat is unquestionably the best sort of grain cultivated for the use of man, barley (*Hordeum*) is grown to little less extent, more particularly in the East, as in Egypt and Syria, where it forms the staple grain for making bread corn. Barley, indeed, wants the chemical constituent of gluten, so essential in rendering leavened or fermented bread light; but in the East it is chiefly used in making unleavened bread in the form of thin cakes, such as are common in Scotland and Ireland among the peas-

santry, and which are far from being unpalatable to those who are accustomed to their use. It was, without doubt, such cakes most probably of barley, which are mentioned when the Lord appeared to Abraham in the plains of Mamre, "And Abraham hastened into the tent unto Sarah, and said, Make ready quickly three measures of fine meal, knead it, and make cakes upon the hearth," Gen. xviii. 6. This is precisely what the Arabs of the desert do to entertain strangers to this day, using barley meal to prepare their hearth cakes. But the bread used for the tabernacle is expressly ordered to be of wheat, "unleavened bread, and cakes unleavened tempered with oil, and wafers unleavened anointed with oil: of wheaten flour shalt thou make them," Exod. xxix. 2. The bread with which our Saviour performed the miracle of feeding the multitude with five loaves and two small fishes, is expressly said to have been made of barley.

Like wheat, the origin of barley is unknown, the cultivated species not having been discovered by botanists, growing in a wild state, in any part of the world hitherto explored. Wild species of barley, however, different from the cultivated sorts, occur in this country; and one in particular, the wall barley (*Hordeum murinum*) is very common by waysides and in waste places. It is a low growing grass, bearing a large bearded ear, not unlike the cultivated barley, but with the grains too small to be used as bread corn. Whether this small wall barley could be successfully crossed, so as to produce ears productive enough to repay cultivation has still to be proved by experiments, which it is not unlikely may be tried at no distant period.

It is much to be regretted, that so great a quantity of barley, important as it is as an article of food, both for man and for domestic animals, should be wasted in the manufacture of intoxicating liquors; barley being the best grain for the purposes of distillation, and from the ready market thence arising, the farmer is often induced to grow barley to the exclusion of crops which would be more directly useful in furnishing human subsistence.

The great antiquity of oats (*Avena sativa*) is not so clearly made out as in the case of wheat and barley, most prob-

ably, because this grain is more adapted to the agriculture of a colder climate than the other sorts of corn, and therefore not so common in the Levant, from which our chief knowledge of antiquity is derived. Oats have been stated to have been found growing wild in the island of Juan Fernandez, in the South Sea; but though this fact cannot be disproved by any negative evidence, it is by no means improbable, that the few plants discovered there had been produced by grains accidentally scattered there by some of the numerous pirates or buccaneers, who infested those seas soon after their discovery. Be this as it may, it is highly improbable that the cultivated sorts of oats could have been originally procured from Juan Fernandez, or any other locality in the South Seas, and introduced from thence into Europe.

Among the species of oats actually found wild, the tall oat (*Avena flavescens*) is very common in hedges and copses, often overtopping the thorns and brambles, and waving its pale yellow ears, in the autumn, in a pleasing manner among the bushes. It very nearly resembles the cultivated oat, but is much taller in growth, and the grains are small, and not worth the trouble of harvesting for the purpose of food.

Oats will grow in soils which will not bear either wheat or barley, and in situations unsuitable to other grain. The writer of this article has seen tolerable crops, of this grain, on steep declivities in the Black Forest, where the soil was little else besides broken shale or slate-stone; and also close to the edge of the perpetual snow at the Glacier de Boissons, on Mont Blanc; and in the mountainous parts of Scotland, and the hilly districts of Derbyshire, it is almost the only grain cultivated. In many parts of Ireland, oats are grown on land which would bear wheat well, were the farmer able to give sufficient manure, or even if he understood the mode of managing wheat.

Although oats do not malt so well as barley, or even so well as wheat, great quantities of them are wasted in distilling ardent spirits, in consequence of being cheaper in the market; but the spirit produced from oats is inferior in quality.

Rice (*Oryza*) is another grain of great value as an article of food; but from its requiring a warm climate to

bring it to maturity, it cannot be cultivated profitably in Europe. It requires also to be supplied with abundant moisture at one stage of its growth, and therefore it will not thrive even in tropical countries, where the soil is uniformly dry. The marshy parts of Hindostan, and of Carolina, are the chief parts of the world where rice is brought to perfection; and owing to peculiarity of soil, or of climate, or both, the American rice is so much finer than that of the East Indies, that it fetches about double the price in the market. It is rare to see a plant of rice in this country, even in greenhouses. The writer of this, though he has visited most of the collections of growing plants in the greater part of Europe, does not recollect having ever seen more than a single plant of rice, which was in the botanic garden at Amsterdam; but it was in a sickly state, and not likely ever to come into ear.

The writer is not aware whether rice is ever found growing in a wild state, in localities where it could not be supposed to have come from cultivated fields.

A no less important grain than rice is maize, or Indian corn, (*Zea Mays*), which had been cultivated for time immemorial in America, before it was discovered by Columbus. Maize is a plant of greatly larger growth than any other sort of corn, in the leaves, in the ear, and in the grain. It forms the staple crop in America, where the farmers make it answer a great number of economical purposes, besides supplying their families with bread corn.

Several attempts have been made to grow maize in this country, but it has not been found to answer the expectations of the most sanguine experimenters. Even if the soil and climate were better adapted to bring it to maturity, it is very questionable whether the produce would ever be relished here as an article of food, it being so much inferior in nutritive, as well as in palatable qualities to wheat. On the continent, such as in the Grand Duchy of Baden, where it has been introduced to some extent, the writer observed, that the plants were in patches on the fields, and by no means what would be called even, much less good crops. Yet the land there is rich, and capable of bearing the far more exhausting crops of hemp and tobacco. When Indian corn, therefore, cannot be grown

well in the superior soil and warmer climate of Baden, it is useless to think of ever making it a staple crop in the South of England or Ireland. In favourable seasons, indeed, it might succeed tolerably; but in our usual seasons it is only fit to be grown by amateurs as a matter of curiosity.

Rye, (*Secale*), though used as bread corn by several nations of Europe, is by no means so important a grain as any of the preceding, being less nutritive and less palatable, even to the inferior animals, of which the practice of some farmers affords a remarkable proof: they sow a narrow border of rye around their crops of wheat and other grain; and when the crops are thus fenced in, they are not attacked by poultry, nor even by the wild birds, as these seldom alight in the centre of corn-fields, but keep on the outer boundaries in their depredations; and, as they do not like rye, when they find it around the sides of the field, they proceed no further.

The ear of rye is apt to be infested with what is termed the ergot or spur, concerning the origin and nature of which various conflicting opinions have been maintained. The ergot or spur appears like a grain of rye, much enlarged, both in length and thickness, and is changed, besides, from its natural colour to a dingy purple. M. Fries and others maintain this to be a fungus growing upon the rye; but it appears more probable that it is only the grain itself thus enlarged, in consequence of the puncture of insects, such as the grass-plant louse (*Aphis Graminis*.) Be this as it may, when the ergot abounds in rye, and this is made into bread, it is apt to produce serious effects on those who eat it in any quantity; and instances have occurred, in which a disorder has been caused by it, similar to the plague.

The powerful effects of the ergot of rye (*Ergota*) on the human frame, has caused it to be introduced into medicine; and in some cases it has been found to be a valuable addition to our remedies.

The bread made from rye, on the Continent, is very black, and being made with leaven, and not with yeast, is sour, and to a stranger, extremely unpalatable. That which is sold in London, by some bakers, as rye bread, is, on the contrary, very good, and well flavoured, and is precisely similar to brown wheaten bread.

J. R.

THE STRANGE LAND.

A FEW hours' passage, attended perhaps with but little inconvenience, conducts us to a foreign land. He who has left the bosom of his family, and it may be a large circle of endeared connexions, deeply interested in his welfare, and accustomed to tender and receive the varied expressions of affectionate regard, is thus speedily transformed into "a stranger;" and can only expect attention at the cost of silver and gold. The excitement accompanying such a transit, is the chief prevention of the feeling of solitariness, which might otherwise become oppressive and painful.

The contrast between England and France, as it strikes at once on the eye, is exceedingly great. The houses of the latter country, so unlike our mansions and cottages, and frequently as remarkable for their narrowness as their height, with their almost smokeless chimneys; the huge elevation of many of the hotels, one of which is described as that of "the Universe;" the official buildings, to which those of England have little or no resemblance; the rarely paved streets, in which mounted travellers and pedestrians are often strangely jostled together, with here and there a solitary lamp suspended across them by a chain; with the country, having its peculiarities of building and tillage—remind the native of this sea-girt isle that he is not at home.

As he proceeds on his way, various other objects attract his attention. Perhaps he does not proceed far before he has to turn out of his path; for at the door of many a house may be observed heaps of fagots, or portions of trees, hewn down in some neighbouring forest, with two, three, or more persons engaged in sawing the huge masses, splitting them with wedges, and then filling baskets with this fire-wood, to be raised by a rude crane which projects from numerous dwellings, to a loft on the top, its common depository. Yet wood is often dear in France, and coal is very costly. Scarcity must sometimes be felt, and the sufferings produced by a want of fuel cannot be known by those who have abundance. In Normandy, at the present day, such, it is said, is the dearth of wood, that persons engaged in various works of hand, as lace-making by the pillow; sit up during the winter-nights

in the barns of the farmers, where cattle are littered down, that they may be kept warm by the animal heat that is around them; availing themselves of this advantage by sleeping in the day. Thanks be to God that our circumstances are different; and that coal has proved one of the greatest treasures of the British soil!

The vehicles of France cannot remain long unnoticed. Sedans, carts, chaises, are all so completely its own, that our English conveyance—not forgetting the animal or animals by which it is drawn—is detected at once, like a sovereign among half-pence. Look at these two figures in deep conversation. One is attired in a long blue frock and a straw hat: the other has a blue cloth jacket, bedizened with stripes of red or white, perhaps both; his head is surmounted by a shining hat decorated with a cockade; and his legs are hidden by a pair of huge boots. The former is the driver of "the diligence," little like, it will be admitted, the English stage-coachman, with his frock-coat, or a multiplicity of coverings, his huge roll of handkerchief, and his bouquet of flowers: the other is a French postilion.

Now, step aside and observe that ponderous vehicle, which looks something like a coach fast jammed between two post-chaises, yet all of them French, with a large tilt over the front, and six horses attached to the shafts by chains and ropes—not to be matched by the worst-harnessed wagon of our land—it is a "diligence." You need not start, as if you were in a moment's danger from its horses: they have stood some time already, requiring no one at their heads, nor would they need "a helper" from the stable, were they to be kept waiting another hour. There they stand as quietly, and looking meanwhile as spiritless, as the jaded creatures often seen at the door of a country ale-house, while the poor, ignorant sot to whom they are intrusted, is drinking within.

The moving population present many remarkable objects: the women, commonly without bonnets, having as a substitute white caps, often very neatly trimmed, and exceedingly white; those of the lower grade, even in the height of summer with large and thick red or purple under garments, or dark cloaks seeming equally cumbrous, but all bedecked with huge bright earrings, neck-

laces, and rings often of gold; the nuns in their coarse attire sometimes surmounted with the black veil, while on the left-side dangles a long rosary and a small ivory skull; and the priests in their simple costume, the train of which is carefully drawn up and fastened at the side, wearing triangular hats, and black crape bands, with a small white edging.

As these pass along, the eye may well affect the heart—themselves the prey of superstition, they strive to increase the number of its victims. Awfully corrupt is their system, and most destructive is its influence. The foundation of rock on which the true believer rests his hopes, is displaced by them for one of sand. It will not bear the scrutiny of the Omniscient God—the decisions of the Eternal Judge. Soon may the thick veil be torn from their eyes, and the Bible subvert the vain and ruinous traditions of men!

Thus we have glanced at some of the objects which meet the view on another shore; but it should not be forgotten that in reference to this world we should aim to resemble David, who styled himself a stranger as well as a sojourner. Every man is a stranger, who is not a native of the place where he resides; but a sojourner is one who makes only a passing visit to a place, with a resolution to leave it again, and to proceed on his way. Such is the distinguishing character of the people of God. They would not live on earth always; they would only sojourn “till their change come;” for they are strangers in affection as well as condition; their “treasure is in heaven, and their hearts are there also.” Those only are unspeakably happy, who feel that they are foreigners here, and that in heaven alone they will be at home.—A.

HOLY ASPIRATIONS.

IN Thee, O Lord, I expect my true felicity and content. To know Thee, and love Thee, and delight in Thee, must be my blessedness, or I must have none. The little tastes of this sweetness which my thirsty soul hath had, do tell me that there is no other real joy. I feel that thou hast made my mind to know thee, my heart to love thee, my tongue to praise thee, and all that I am and have to serve thee. And even in the panting, languishing desires and motions of my soul, I find that thou, and only thou, art its resting

place; and though love do now but search, and pray, and cry, and weep, and is reaching upward, but cannot reach the glorious light, the blessed knowledge, the perfect love, for which it longeth; yet by its eye, its aim, its motions, its moans, its groans, I know its meaning where it would be, and I know its end. My displaced soul will never be well, till it comes near to thee, till it knows thee better, till it love thee more. Wert thou to be found in the most solitary desert, it would seek thee; or in the uttermost parts of the earth, it would make after thee. Thy presence makes a crowd a church, thy converse maketh a closet, or solitary wood or field, to be akin to the angelical choir. The creature were dead, if thou wert not its life; and ugly, if thou wert not its beauty; and insignificant, if thou wert not its sense. The soul is deformed which is without thine image, and lifeless which liveth not in love to thee, if love be not its pulse, and prayer and praise its constant breath. The mind is unlearned, which readeth not thy name on all the world. He dreameth who doth not live to thee. Oh let me have no other portion! no reason, no love, no life, but what is devoted to thee, employed on thee, and for thee here, and shall be perfected in thee, the only perfect, final object for evermore. Upon the holy altar, erected by thy Son, and by his hands and his mediation, I humbly devote and offer to thee this heart—oh that I could say with greater feeling—this flaming, loving, longing heart!

But the sacred fire which must kindle on my sacrifice, must come from thee. It will not else ascend unto thee; let it consume this dross, so the nobler part may know its home. All that I can say to commend it to thine acceptance, is, that I hope it is washed in precious blood, and that there is something in it that is thine own. It still looketh toward thee, and groaneth to thee, and floweth after thee, and will be content with gold, and mirth and honour, and such inferior fooleries, no more. It lieth at thy door, and will be entertained, or perish. Though, alas! it loves thee not as it would, I boldly say, it longs to love thee. It loves to love thee. It seeks, it craves no greater blessedness than perfect, endless, mutual love. It is vowed to thee, even to thee alone, and

will never take up with shadows more; but is resolved to lie down in sorrow and despair, if thou wilt not be its rest and joy. It hateth itself for loving thee no more, accounting no want, deformity, shame, or pain, so great and grievous a calamity.—*Baxter.*

—◆—
PROGRESS OF NATURAL HISTORY.

AN enlightened attention to animated nature, appears to have been discovered by Adam, the father of the human race. Speaking of his situation in the garden of Eden, Bishop Horne says: "We are not certain with regard to the time allowed him to make his observations upon the different objects with which he found himself surrounded; but it should seem either that sufficient time was allowed him for that end, or that he was enabled, in some extraordinary manner, to pervade their essences and discover their properties. For we are informed, that God brought the creatures to him, that he might impose upon them suitable names; a work, which, in the opinion of Plato, must be ascribed to God himself. The use and intent of names, is to express the natures of the things named; and in the knowledge of those natures, at the beginning, God who made them, must have been man's instructor. It is not likely, that, without such an instructor, men could ever have formed a language at all; since it is a task which requires much thought; and the great masters of reason seem to be agreed, that without language, we cannot think to any purpose. However that may be, from the original imposition of names by our first parent, we cannot but infer, that his knowledge of things natural must have been very eminent and extensive; not inferior, as many suppose, to that of his descendant Solomon, who 'spake of trees, from the cedar to the hyssop, and of beasts and fowls, and creeping things and fishes.' It is, therefore, probable, that Plato asserted no more than the truth, when he maintained, according to the traditions he had gleaned up in Egypt and the East, that the first man was of all men the greatest philosopher."

But though the probability be admitted, there seems no reason to think that the extended knowledge of our great progenitor descended to his immediate offspring; while multitudes have

been, and still are, grossly and criminally ignorant of natural history. To go but a short distance back: the seventeenth century was near to its close, before this most delightful science had received more than a slight degree of attention. Scarcely any effort was made to explain even the most familiar phenomena; and when it was attempted, the want of observation and judgment was supplied by the fictions of the imagination and the extravagances of credulity. The time described by Linnæus as "the dawn of the golden age of natural history," is, therefore, of very recent date.

This appeared in the labours of the celebrated John Ray, who has been styled, "the father of natural history," and, "the Aristotle of England." Shortly after his entering the university of Cambridge, he is mentioned in terms of high commendation; not only for his classical attainments, but also for his skill in the science in which he was afterwards so distinguished. His ardent desire of knowledge, and the pleasure he derived from pursuits peculiarly congenial to his disposition and taste, led him sooner or later, to examine almost every one of its departments. He travelled through the greater part of England and Wales, zealously examining the native plants, nor did he neglect the opportunity afforded of inspecting whatever was either new or interesting. He afterwards made a journey into Scotland, accompanied by his particular friend, Mr. Willoughby, and another gentleman, to examine the natural productions of that country, which were even less known than those of England; and these efforts were followed by extensive observations, while travelling for three years on the continent.

To Willoughby, his almost inseparable companion, Ray wisely wrote: "Let it not suffice us to be book learned, to read what others have written, and to take upon trust more falsehood than truth; but let us ourselves examine things as we have opportunity, and converse with nature as well as books. Let us endeavour to promote and increase this knowledge, and make new discoveries; not so much distrusting our own parts, or despairing of our own abilities, as to think that our industry can add nothing to the invention of our ancestors, or correct any of their mistakes. Let us not think that the bounds

of science are fixed like Hercules' pillars, and inscribed with a *ne plus ultra*. Let us not think we have done when we have learnt what they have delivered to us. The treasures of nature are inexhaustible. There is employment enough for the vastest parts, the most indefatigable industries, the happiest opportunities, the most prolix, and undisturbed vacancies."

In such sentiments and feelings Wiloughby most fully concurred. Derham says: "He prosecuted his design with as great application as if he had been to get his bread thereby. All which I mention," he adds, "not only out of the great respect I bear to Mr. Wiloughby's memory, but for an example to persons of great estate and quality, that they may be excited to answer the ends for which God gives them estates, leisure, parts, and gifts, and a good genius; which was not to exercise themselves in vain or sinful follies; but to be employed for the glory, and in the service of the infinite Creator, and in doing good offices in the world." Happy indeed would it be, were these great ends of the favours of God kept constantly in view by all.

Availing himself of the labours of Ray, Linnæus, an illustrious Swede, reduced to a systematic arrangement all the known productions of nature, and assigned to each two Latin names: the first being common to several individual kinds, the last to only one. The wolf, the fox, and the dog, for example, are very similar in form and in manner of living; these three, together with some others much resembling them, he, therefore, considered as constituting a family, or as he termed it a *genus*, and to this one he gave the name, *canis*, the Latin word for a dog. The wolf, the fox, and the dog were then individually considered a separate kind, which he termed a *species*: thus employing the Latin word for wolf, he called the first, *canis lupus*; adopting, then, the Latin name for fox, he called the second, *canis vulpes*; and using a word to denote a more familiar or domestic creature, he called the third, the dog, *canis familiaris*. The plan of this eminent naturalist has been universally received. With the discrimination of true genius, he detected the differences of external form, which when recorded, enabled the student pretty readily to ascertain for

what animal or group of animals each description was intended. But this was not sufficient for the more modern philosopher. Clearly perceiving that difference of outward form was but a variation of structure, detected in those parts that met the eye, he concluded that other differences were concealed, quite as important as those which were so obvious. He saw, also, that structure was admirably adapted to the mode of life; and he justly concluded that from structure he might infer the habits of the animal, and from the habits of the creature its appropriate structure. Still another step was wanting: it was necessary to have some form as a type, and to appreciate and describe others by their variation from it. As, however, the human frame had been for centuries well understood, and its various parts accurately defined and named, the necessity was no sooner felt than supplied; for it was instantly perceived that a vast number of animals possessed essentially the same parts as man; and that though they varied greatly in proportion, they were always comparable with the same parts in the human being.

Such was the origin of comparative anatomy, a science that compares the parts of animals with the same parts in man, and describes the animal by the difference. It has been shown that the fin of a whale and the foot of a dog are not only attached in the same way, and represent in their position the hand of a man; but that they contain the same parts, as bones and joints, thus establishing the great principle of uniform structure. Of the application of this science, many striking illustrations might be given: to furnish only one instance, showing the analogy that exists, as well as the variety of the great Creator's works, an immense number of bones were taken from the gypsum quarries at Mont Martre near Paris, and on the eminent naturalist Cuvier devolved the task of their arrangement. Deeply interested was he on finding that his speculations on a single bone were fully established when the skeleton was complete; as he took it from the heap, he quickly determined the character and circumstances of the animal to which it had belonged; and the discovery and arrangement of the other parts placed beyond all doubt the accuracy of his first decision.

CHANGES OF FEATURE IN TROPICAL LANDS.

THE rivers, the rippling brooks, and headlong mountain torrents of old England continue for ages to run in their wonted courses, their utmost depredations being an occasional overflowing of their waters, or the temporary shifting of their sands. The records of remote ages show us that, centuries since, our forefathers were acquainted with the streams of our lands, wearing very much the same aspect, and at least flowing within the same banks, as in our own days. But it is otherwise with the rivers of India. These vagrant waters, from the mighty Ganges to the meanest tributary, are constantly seeking new channels, shifting over the plain from city to city, perseveringly undermining all barriers, whether natural or artificial, and compelling the husbandmen and the villagers to retreat before their irresistible invasions. In many parts, the Ganges may be traced to have had its course, but a few years since, distant full twenty miles from its present channel: it has been known to make a digression of three or four miles in a single season. This is chiefly attributable to the soft and sandy nature of the soil, the peculiarly abrupt and tortuous windings of the stream, and the very sudden accumulation of the waters at the commencement of the monsoon, suddenly converting the smooth and silent river into a turbulent flood, which rolls down from the highlands with terrific force, saps or overleaps all opposition, and fills its former bed, while it devastates the adjacent country, and carves out for itself a new channel, or usurps that of some other stream.

It is not many years since the river Sone, so called from the word *sona*, gold, used to pour its broad waters into the river Ganges, under the walls of a small town named Maena: the junction now takes place about four miles lower down, at Moued; which, formerly an inland town, now stands upon a projecting tongue of land washed by both rivers. Neither of these places could be recognized by its former inhabitants, so complete is the transformation.—*Oriental Annual*.

 OLD MORRIS BROOK.

OH how I love to walk about with an old man, and to hear him talk wisely,

while he shakes his grey locks at the end of every remark he makes! Morris Brook was the very man for me: I loved old Morris very heartily. Morris Brook was by far the oldest man in the parish. He lived at the cottage with the porch to it, just on the borders of the heath. Many people thought the spot desolate and lonely; but on a summer's day, when the sun shone on the cottage, when the grass was green on the common, and the furzebushes were in bloom, with their bright yellow flowers, I used to think the place as lively as May-day.

Old Morris and I were good friends; he loved to talk, and I loved to listen, so we did very well together. One of the last walks I took with him, not long before his body was committed to the dust in Moreton churchyard, close under the stone wall and very near the grave of his father Walter Brook,—one of the last walks I took with him was in the fall of the leaf, somewhere about the middle of October; and we went along the common, and up the crooked pitch, and over the wooden bridge that crosses the mill-stream, and through the coppice, and then round by the sand holes and the rabbit-warren; but I will be a little more particular.

Whoever went abroad with Morris Brook, if he heard nothing else from the lips of the old man worth hearing, was sure to hear half-a-dozen or a dozen texts of Scripture, well applied; for the Bible was almost the only book Morris Brook read, and very seldom indeed did he ever speak of any other. You might, to be sure, now and then see him turning over the leaves of a tract or two, printed in large letters; but this was not very often the case. "Tracts are good things," said he; "but almost all that is good in them is got out of the Bible." I said it was about the middle of October, that Morris Brook and I walked out together, and I remember well, that as we passed the big tree at the turn of the crooked pitch, the leaves were flying about, and Morris gave me the first text of Scripture that passed his lips in his walk. "We all do fade as a leaf," said the old man, and shook his head, and seemed to be thinking within himself as he walked onwards, for not another word did he speak for some time after. Morris Brook was bent sadly, so that he walked with two sticks: his legs were very thin, and his old coat

with big pockets hung but loosely upon him. His hat was of all manner of shapes, and very brown; for it had lasted him a number of years. The old man wore steel buckles, and kept up the odd fashion of turning the strap of his shoe on one side, instead of letting it be flat and straight across his foot. His old leathern breeches had done him some service; for I never saw him wear any other, except it was on the sabbath, when he wore another pair as yellow as a new glove. Morris generally arrived at the church porch, before one half of the congregation had thought of setting off.

Old Morris, in his latter days, had a habit, like most old people, of talking of himself, and in the course of a walk he would often liken himself to a dozen different things: a proof of this I will give you.

By the time we had got to the wooden bridge, old Morris began to walk slowly, not so much because he was tired, as because he seemed to want to talk a little seriously, at least I thought so; for, leaning against the rail of the bridge, and looking down on the little water that was in the brook, he began thus: "I have seen the time when the water of this brook has overflowed the banks on each side, and swept away the bridge that stood where we are now standing; but 'tis low enough now, and creeps along as if it would stand still by and by: 'tis just like old Morris. When I was a young fellow, I felt as strong as a horse, and seemed as if I could carry the whole world before me; but that day is gone by, and I crawl along as lazily as the brook does. 'Lord, make me to know mine end, and the measure of my days, what it is; that I may know how frail I am.' I wish that I had put my strength, while I had it, to a better purpose; but 'time and tide stay for no man,' and 'tis too late now to make amends for the past. You are a lad, mind that you carry your cup upright, and act more wisely than I have done, and drink more freely of the brook of God's promises by the way, that you may lift up your head."

At the half-way oak, Morris Brook stopped again. "It has stood many years," said he, looking up at the tree; "but it won't stand many more. The acorns and oakballs that I have got from those branches, when a lad, would fill a

bushel, but they have right few on them now. The tree has seen its best days, like old Morris, and a green leaf or two is all that it has to show; for the trunk is hardly any thing but touchwood. We shall soon lie down together, and be both of us forgotten. Heavenly wisdom 'is a tree of life to them that lay hold of her. Happy is every one that retaineth her.'"

In passing by the old hovel at the end of the coppice, Morris Brook pointed to it with one of his sticks. "See," said he, "there is old Morris Brook again. I had a hand in putting up that hovel, the timber was good and sound, and the thatch wind and water tight; but for all that 'tis a poor crazy concern now, right little thatch upon it, and the timbers and the roof are coming down both together. I don't know which will be down first; for, like the old house, I can hardly bear my own weight. 'My house of clay has its foundation in the dust, and must be crushed as it were before the moth.'"

While Morris Brook made these remarks, I could not help looking upon him with concern; for I thought that his words were too true, and that in a little time he would be mouldering in the dust.

"What!" said Morris Brook, when we came to the hole in the rock in the shady part of the lane, between the sand holes and the rabbit-warren, "is the spring dry at last? I have drunk of its water since I toddled along in petticoats, and could always find enough in the hottest summer's day to slake my thirst. The water is all gone now," said he, pushing the end of one of his sticks into the wet sand at the bottom, "and 'tis time Morris Brook was gone too; for, like the spring, his usefulness is past away. You are young, Edward, you are young, and it matters but little whether or not you drink of this spring; but mind it matters a great deal that you drink of the well of living waters, the fountain of eternal life. He who drinks of this spring when the water comes again will die, but he who drinks of the other, will live for ever."

In this manner, old Morris Brook hobbled along, now making a remark and now repeating a text of Scripture, till we came to his own cottage door. As he sat himself down on the seat in the porch, I thought to myself, Morris is

an old man, and his strength is almost gone, he is bent double, and walks with two sticks, and his clothes hang like bags on his poor thin body; but for all these things, I had rather spend an hour with old Morris Brook than with any man in the parish.

DILIGENCE IN USING THE MEANS OF GRACE.

MR. WILBERFORCE'S diligence in using all the means of grace was a striking feature of his new character. "What my heart most impels me now to say to you," he writes to his sister, "is, 'Search the Scriptures,' and with all that earnestness and constancy which that book claims, in which 'are the words of eternal life.' Never read it without praying to God that he would open your eyes to understand it; for the power of comprehending it comes from him, and him only. 'Seek, and ye shall find,' says our Saviour; 'Take heed how ye hear:' which implies, that unless we seek, and diligently too, we shall not find; and unless we take heed, we shall be deceived in hearing. There is no opinion so fatal as that which is commonly received in these liberal days, that a person is in a safe state with respect to a future world, if he acts tolerably up to his knowledge and convictions, though he may not have taken much pains about acquiring this knowledge, or fixing these convictions."

Again he says, "Watch and pray, read the word of God, imploring that true wisdom which may enable you to comprehend and fix it in your heart, that it may gradually produce its effect under the operation of the Holy Spirit, in renewing the mind and purifying the conduct. This it will do more and more the longer we live under its influence; and it is to the honour of religion, that those who, when they first began to run the Christian course, were in extremes,—enthusiastical perhaps, or rigidly severe,—will often by degrees lose their several imperfections, which though by the world laid unfairly to the account of their religion, were yet undoubtedly so many disparagements to it; like some of our Westmoreland evenings, when, though in the course of the day, the skies have been obscured by clouds and vapours, yet towards its close, the sun beams forth with unsullied lustre, and descends below the horizon in the full display of all his

glories; shall I pursue the metaphor, just to suggest, that this is the earnest of a joyful rising, which will not be disappointed?"

WRITING ON RODS.

THE first instance of this practice which we have on record, is in Numbers xvii. 2, where a Divine command is thus given to Moses. "Speak unto the children of Israel, and take of every one of them a rod according to the house of their fathers, of all their princes according to the house of their fathers twelve rods: write thou every man's name upon his rod." Another allusion to the same custom appears in Ezekiel xxxvii. 16, 17: "Thou son of man, take thee one stick, and write upon it, For Judah, and for the children of Israel his companions: then take another stick, and write upon it, For Joseph, the stick of Ephraim, and for all the house of Israel his companions: and join them one to another into one stick."

It is remarkable that this practice, which originated in the wilderness of Arabia, should have prevailed among the early inhabitants of northern Europe. Most of the Teutonic nations employed certain characters, denominated Runes, the origin of which, with some variations, also used by the Celtic nations, ascends into the most remote antiquity. Many of the letters were named after trees: as **H** A, or Ae, Oak: **B** B, Beore, Birch: **D** Th. Thorn; others after different objects, as **f** H, Hagel, or Hail: **I** Is, or Ice, and **M** M, Man; and in short, all the names have some meaning.



The engraving represents a Runic ring found in Norway. The word *Rune* is traced by Wormius to *ryn*, a furrow, or channel; and he suggests that it was adopted from the resemblance which such characters cut in wood, and running in perpendicular lines, have to a furrow.

Now these Runic letters, described as those "which the great Ancient traced out," the Scythians were accustomed to inscribe on small thin billets of wood, and by means of these, information was often dispatched to a distance. Sometimes these documents were written from the right hand to the left, and frequently the line commenced running from the top to the bottom, or from the left to the right, and so back to the left again, after the manner of the ancient Greeks.

The Runic staves were principally used by the priests; but inscribed with characters denoting the months, weeks, and days: they were common among the people, and served the purpose of an almanac. Dr. Clarke saw in Sweden several of these calendars, and though exhibited chiefly as curiosities, many of the inhabitants were able to decipher their mystic characters. One of them was of more elaborate workmanship, where these had been very elegantly engraved on a stick, like a physician's cane.

The Danes introduced these almanacs into England. They were formed in various ways, and of diverse materials; sometimes of the skins of eels, which being drawn over a stick properly inscribed, retained the impressions of it; but the most usual form was that of walking staves or sticks, which were carried about and taken to church as well as market. Each of these is divided into three regions: the first indicates the signs, the second, the days of the week and year, and the third, the golden number. The saints' days are expressed in hieroglyphics, significative of some endowment of the saint, or of some circumstance in his history. Against the notch for St. David's day, the first of March, is represented a harp; against St. Crispin's day, the twenty-fifth of October, a pair of shoes; against St. Lawrence's day, the tenth of August, a gridiron; and against New-Year's day, a horn, the symbol of those deep potations in which our ancestors indulged at that period.

In a work on husbandry, published in the reign of Edward VI. and entitled, "A Short Information for a Young Gentleman that intended to thrive," there is the following paragraph for his special direction: "And when he walketh in his fields, let him have in his purse a pair of tables; and when he seeth any thing that would be amended, to write it in his tables. And if he cannot write,

let him nick the defects upon a stick, to show his bailiff."

This practice of nicking upon the bailiff's stick, is still in use in the Isle of Portland. One of these sticks was seen there by a visitor, a few years ago, and was said to contain the admeasurement and boundaries of all the landed property in the island. To him, however, though intelligent, these notches were complete hieroglyphics, while to the natives, who could neither read nor write, they were perfectly plain.

It is also worthy of remark, that a singular custom prevailed a few years ago, and probably does still, at Pamber, near Basingstoke, in Hampshire. The court-leet holden annually for that manor, is opened in a small piece of ground, called Lady-Mead, which belongs to the tithing-man for the year; and from thence an adjournment takes place to a neighbouring public-house. The proceedings of the court are recorded on a piece of wood, called a tally, about three feet long, and an inch and a half square, furnished every year by the steward.

One of these singular records was produced, some time since, as evidence, in a law-suit at Winchester. The mode of keeping accounts by tallies, or cleft pieces of wood, in which the notches are cut on one piece, conformably to the other, one part being kept by the creditor, the other by the debtor, is still practised, in particular cases, in many parts of England. A tally was given for a long period by the Exchequer, to those who paid money there as loans; hence the origin of the Teller, or Tally-writer of the Exchequer; and also of the phrase to tally, to fit, suit, or answer exactly. The conflagration of the late houses of Parliament, in consequence of burning the tallies too freely, will be at once remembered.

W.

CONTENTMENT.

When you are rich, praise God for his abundant bounty; when you are poor, thank him for keeping you from the temptations of prosperity; when you are at ease, glorify him for his merciful kindness; and when beset with affliction and pain, offer up thanksgiving for his merciful reminders that you are approaching your latter end.



Protestants pinioned together, and driven from Colchester to London: see page 407.

QUEEN-MARY.

(Continued from page 384.)

The time was now come when characters of the first reputation for integrity, piety, learning, and moral worth, might be brought before a tribunal of popish priests, questioned upon any of the numerous points of erroneous doctrine set forth by the church of Rome, when if they refused to recognize these as the truth, the alternative, "turn or burn," was proposed to them. The dread sentence was soon carried into effect: neither judge, witness, or jury was allowed to interfere, or called upon in reference to the matter.

On January 22, 1555, scarcely a week after the acts renewing persecutions for religion came into force, Gardiner commenced the proceedings under the revived laws against heresy. It was resolved to select such victims, and to execute them in such a manner as might make a general impression. Hooper, bishop of Gloucester; Rogers, vicar of St. Sepulchre's, London, who had assisted in the first edition of the English Bible; Cardmaker, prebendary of Wells; Taylor, vicar of Hadleigh in Suffolk; Saunders, formerly a clergyman of Coventry; Bradford, formerly of Manchester, then prebendary of St. Paul's; all popular characters, and highly esteemed preachers, were the victims selected for the

first sacrifice. The tests proposed to them were, the pope's supremacy and the doctrine of transubstantiation. It is to be remarked: how carefully the papists kept out of sight and avoided discussion on the main subject of difference between their church and the protestants, the doctrine of justification by faith, though, in fact, it was involved in the questions brought forward. The examinations were not prolonged. Bradford was respited for a short time: also Cardmaker, whom the Romanists thought they could induce to turn. The others were condemned without delay, and delivered to the secular power. Rogers and Hooper were detained till it was dark, but a rumour got abroad that they were to be led to Newgate from Southwark, where they had been imprisoned and condemned. The streets were crowded with persons who came out of their doors with lights, entreating the blessing of these confessors, and praying that they might be able to remain steadfast unto the end.

On the 4th of February, Rogers was carried past his own church, St. Sepulchre's, near Newgate, where his wife and eleven children stood to take their last farewell. He was burned in Smithfield. Hooper was taken to Gloucester, and burned before his own cathedral. Saunders was taken to Coventry, where he suffered the same cruel death. Taylor, who had been

exceedingly popular in Suffolk, was sent to Hadleigh, his own town, where he had manfully testified against the restoration of popery. The simple and minute record of his journey and sufferings yet remains; it has drawn tears from many a reader, and bears an irrefragable testimony against popery. A large stone with a



rude inscription, on Aldham common, marks the spot where Taylor suffered.

Gardiner hoped that this simultaneous display of papal ferocity upon such eminent and excellent characters would have at once silenced the protestants. But he was mistaken. The Christian bearing of the sufferers, and the sympathy of the crowds who stood round the burning piles, showed that now, as in earlier ages, the blood of the martyrs would be the seed of the church. He shrunk from the results of his own proceedings, laid the blame upon the queen, and left the farther conduct of these persecutions to more rugged minds. Bonner did not object to the task. We may use the metaphorical language of the poet:—

“When persecuting zeal made royal sport,
With tortur'd innocence in Mary's court,
And Bonner, blithe as shepherd at a wake
Enjoy'd the show, and danced about the stake;
The sacred Book, its value understood,
Received the seal of martyrdom in blood.”

COWPER.

It is stated that he was wont to say, “Let me once lay hold of these heretics, and if they escape me, God do so and more to Bonner.” His first proceedings at once showed that the persecution was to be carried into every rank of life; none were too high to be reached, none so low as to be overlooked. In a few days, Bonner examined and condemned six; a butcher, a weaver, a barber, a country gentleman, an apprentice, and a parish priest; but the voice of the peo-

ple was loudly expressed: even Gardiner used to blame him for dealing so cruelly by honest men. Philip saw that much unpopularity would fall upon himself; he therefore directed his confessor, a friar who had himself been a notorious persecutor, to preach before the court, and blame the putting heretics to death. Bonner was checked for a time, though in a few months persecution was resumed, and even in that month, bishop Farrar was burned in Wales.

Another public exhibition was made in February. Viscount Montague, and the bishop of Ely, passed through the streets of London with their train, beginning their journey to Rome as ambassadors to the pope. The next embassy from England to Rome was in the reign of James II.

At the end of March, the queen sent for the lord treasurer and other counsellors, to whom she declared her remorse, not for causing holy and exemplary men to be burned, but because the crown still possessed some abbey lands, which she desired to resign, committing the disposal of them to the pope and his legate! It is to be observed that, while the parliament guaranteed the possession of these lands to the holders, and the legate gave his sanction thereto, the pope issued a bull excommunicating all persons who continued to hold such property. This was, as Foxe styles it, “a catholic fetch.” The immediate result was the formation of some monastic establishments by the queen. The pope Julius III. did not live to see the effects of this bull. He died, March the 20th, and left behind him the record that the pope to whom England, under queen Mary, submitted to be reconciled, was one of the vilest among the many depraved characters included in the list of popes. We need not insert any of the blasphemies for which he was notorious.

After Easter the burnings were resumed, but we have not space here for the details of the sufferings of the martyrs. They have been amply related by Foxe and others, and would draw our attention from the general course of the queen's policy, which is the most important subject for the general historian to pursue. In March a proclamation was addressed to the justices, commanding that persons should secretly be appointed in every parish, to watch for and give private information of the proceedings of any protestants. Here was a great step towards establishing an inquisition. In

May a letter was addressed to Bonner, in the name of Philip and Mary, complaining that he had "suffered persons to continue in their errors," who had been sent to him by justices agreeably to the proclamation. He was ordered in future to proceed against such characters as "a good pastor and bishop" ought to do. Bonner had for a short interval sickened of his work, but this stimulated him to proceed; perhaps he desired it as a convenient authority for him to plead. But the principal cause for urging forward the course of cruelties, was the anxiety of the queen for the birth of a child! She had for some time expected to be a mother at this season; she was anxious for a safe deliverance, and thought to win the favour of God by persecuting his saints! But He had mercy in store for England, and would not suffer such a stock to be fruitful. After a lengthened period of expectation, it was found that the queen was seriously diseased, and never likely to be a mother. The names of many martyrs who suffered in June, are recorded. Among them were Bradford and Cardmaker. The burning of the former excited a strong sensation. Few of the inhabitants of London closed their eyes during the preceding night.

A new pope, Marcellus II., had been elected. He seems to have been a more worthy character than the generality of Romish prelates. But he only held the see during three weeks. Paul IV. then succeeded to the papal chair, and received the English ambassadors. At first he hesitated to do this, as Mary had retained the title of sovereign of Ireland, assumed by her father, after his quarrel with the see of Rome. But an expedient was devised. The pope asserted his authority as being the earthly power by whom alone kings could reign, by declaring Ireland to be a kingdom, and Mary to be queen of it by his appointment. He then received the ambassadors, outwardly with a gracious air, but he told them in private, that the abbey lands must be restored, and the tribute from England which had formerly been paid to the popes, called Peter-pence, being a penny for every chimney in England, must be again duly collected.

In June a strong proclamation was issued, forbidding all persons to keep in their possession any books contrary to the decrees of popery. Many works were pointed out by name; in addition to those of Luther, and all the leading re-

formers, both English and foreign, all works relating to the service books of the late king, and also Hall's Chronicle, which was particular in the account of the reign of Henry VIII., were forbidden: all these books were to be given up in fifteen days to the bishops or other officers. The protestants were not less active in disseminating the truth. Many little tracts exposing the errors of popery were printed in foreign countries, and brought over to England, where they were privately distributed, or cast about the streets at night. Some of these bore the imprint of Rome, probably that unlearned informers might suppose them to be popish books.

On October 16, bishop Ridley and bishop Latimer were burned at Oxford. The spot where they suffered is still pointed out in the front of Baliol College. The words of Latimer to his fellow-sufferer, when at the stake, are too memorable to be omitted:—"Be of good comfort, Master Ridley, and play the man: we shall this day light such a candle, by God's grace, in England, as I trust shall never be put out." Let us remember this address, and also bear in mind the solemn charge of our Saviour to the church of Sardis: "Remember therefore how thou hast received and heard, and hold fast, and repent. If therefore thou shalt not watch, I will come on thee as a thief, and thou shalt not know what hour I will come upon thee. Thou hast a few names even in Sardis which have not defiled their garments; and they shall walk with me in white: for they are worthy," Rev. iii. 3, 4.

The death of Gardiner quickly followed the last sufferings of these martyrs. He delayed his meal till he could receive the tidings of fire being set to their pile. While feasting, he felt the approach of a mortal disease, the consequence of his vicious course of life. He was able to attend to his official duties a few days longer, when his body became so noisome that it was difficult to get any one to attend him. He suffered severely in mind, repeatedly exclaiming, "I have sinned like Peter; but I have not repented like him!" In his last moments, he expressed decided enmity against the doctrines of grace, yet showed that he was convinced of their truth. Thus the first of the wretched leaders of the English persecution was called to his solemn account.

Gardiner had opposed Pole in many matters; he desired the primacy for him-

self, and therefore often checked the proceedings of the cardinal. Pole now remained the chief adviser of Mary. He left the details of persecution to subordinate agents; but in many ways he showed his earnest desire that the kingdom should be fully reconciled to Rome. Among other matters, the proceedings against Cranmer were pressed forward. Although he was examined with Ridley and Latimer, some months elapsed before the arrangements respecting him were completed. Bonner took an active part in the ceremony of degradation, which he accompanied by raileries and insolent language, crying aloud, "He is no longer my lord! he is no longer my lord!" Bishop Thirlby, who was also present, though a bigoted papist, reproved his conduct. During this interval, every effort was made, both by severity and flattery, to shake, if possible, Cranmer's steadfastness in the faith. He was induced to sign a paper, renouncing his opposition to popery; from this he was led farther, and signed five others in succession; or rather five other papers were exhibited as having been signed by him, though there were strong grounds for believing he never consented to some of them. A promise that his life should be spared, was disregarded; Mary and her council always intended that he should suffer. On March 20, 1556, he was taken to Saint Mary's church, in Oxford, and told that he was to repeat in public the declaration he had made. But Dr. Cole preached what may be called his condemnation sermon, exhorting him to take his death patiently, expressing joy at his recovery to the church, and promising that after his death masses should be said for his soul.

Cranmer had expected this; he came prepared with a written declaration of firm adherence to the truths of the gospel, to which was added, a renunciation of the declarations he had been induced to sign. The church was crowded. All persons attached to the Reformation, rejoiced that the papists were disappointed. The latter were enraged; they pulled Cranmer from the stage on which he had been placed; two Spanish friars, in particular, loudly abused him, and he was hurried to the stake. When the pile was kindled, he thrust his right hand into the rising flame, declaring that it should first suffer, as it had offended by signing his recantation.

The next day Pole was appointed

archbishop of Canterbury; the same night some one wrote on the gates of Lambeth Palace, the solemn warning addressed to Ahab, 1 Kings xxi. 19: "Hast thou killed, and also taken possession?" Pole was now at the highest eminence which he attained; we shall see that though he had toiled for it through more than twenty years of treachery, intrigue, and murder, he enjoyed it a very short space of time. He had sought the popedom, but in vain; once, as already stated, he had nearly attained that dignity, but was considered by his fellow-cardinals as too much inclined to reform the abuses of that church.

Large grants of lands were made by the queen to Pole; in the close of the year, he was made chancellor of the University of Oxford; two Spanish friars, Soto and Garcia, were settled there as professors of divinity. His influence was such that the French ambassador wrote, that the queen had expressly commanded her council to conclude nothing of any weight without communicating it to Pole, having resolved to do nothing of importance without his authority and advice. Among the proceedings under his influence, was a commission for a renewed "diligent search and discovery of heretics," directing the bishop of Exeter and others, "to inquire into all heresies; to search out and take possession of all heretical and seditious books, letters, and writings; to search out all persons who refused to be confessed, or to hear mass, or to receive the sacrament, or to come to their parish churches; to call before them any suspected persons, and to award such condign punishment, by fine or imprisonment, as to their wisdom should seem meet." The people, as Strype describes, now formed three classes: "The one sort, the papists; the second, the open professors of the gospel; the third and largest, were of the same judgment with the professors: they, in their minds, disallowed popery, and esteemed its worship to be idolatrous; yet, out of policy, they outwardly complied with that religion, and went to mass, keeping their opinions to themselves, for their own security."

The condition of the protestants in England at this time was very pitiable. They were liable to the severest punishments; every action was observed by the spies and informers of the persecuting bishops; whenever occasion could

be found they were imprisoned, nor was that a light matter. The imprisonment of these days is graphically described by Coverdale, in the preface to his "Letters of the Martyrs;" we must not omit this, although it has been often quoted. "Some being thrown into dungeons, ugly holes, dark, loathsome, and stinking corners; other some lying in fetters and chains, and loaded with so many irons that they could scarcely stir; some tied in the stocks, with their heels upward; some having their legs in the stocks, and their necks chained to the wall, with gorgets of iron; some standing in the most painful engines of iron, with their bodies doubled. Some whipped and scourged, beaten with rods and buffeted with fists; some having their hands burned with a candle, to try their patience, or force them to relent; some hunger-pined, and most miserably famished. All these torments, and many more, even such as cruel Phalaris could not desire worse, were practised by the papists, the stout, sturdy soldiers of Satan, thus delighting in variety of tyranny and torments upon the saints of God, as it is full well and too well known, and as many can testify which are yet alive, and have felt the smart thereof. Yea, and furthermore, so extremely were these dear servants of God dealt withal, that, although they were most desirous by their pen and writing, to edify their brethren, other poor lambs of Christ, yet were they so narrowly watched and straitly kept from all necessary helps, as paper, ink, books, and such like, that great marvel it is, how they could be able to write any one of these or other so excellent and worthy letters. Sometimes for lack of ease, sometimes for lack of light, they could neither see to write well, nor to read their letters again; sometimes through the hasty coming in of the keepers or officers, who left no corner or bed-straw unsearched; yea, sometimes they were put to so hard shifts, that like as for lack of pens they were fain to write with the lead of their windows, so for want of ink they took their own blood, and yet sometimes they were fain to rend and tear what they had written at the hasty coming in of the officers."

Strype shows the activity with which the queen and her council, under Pole's influence and direction, urged forward persecution. In the month of May, orders were given "to make a despatch of all

those that were already condemned for religion." Even Bonner, though emphatically called the common slaughter-man, was urged forward to increased activity. Still it was evident that the mass of the people, though compelled to submit, were averse to these proceedings; a report to the council, about this time, denounced four parishes in Essex, as still continuing the English service. The severe sufferings of the protestants are well described by Foxe; but the details of Strype afford a fuller idea of the extent and the minuteness to which the investigations and harassing of individuals were made to extend. And Strype also describes the cruel sufferings then commonly inflicted, in terms which make deeper impression than more laboured delineations. The following extract is taken from his "Occurrences in the State," during May, 1556:—"On the 15th day, two tall men were carried in a cart from Newgate unto Stratford, Bow, to be burned; the one blind, the other lame; the one named, Hugh Leveroke, a painter, dwelling in St. Swithin's-lane, and the other, that is the blind man, dwelling in St. Thomas Apostle. And on the 16th, between nine and ten of the clock aforenoon, were three women, who were of Essex, carried unto Smithfield to end their lives by fire." When he notices in his "Journal of Occurrences," any criminals suffering, he states their offences; but the mass of sufferers in queen Mary's days, had no crime laid to their charge, but that of seeking to worship in spirit and in truth: it was enough for him thus to state their sufferings; the cause was sufficiently understood.

At this period, several were hanged and dismembered in the streets of London as traitors, having been driven to utter expressions or to think of acts, which indicated their disapproval of the state of public affairs. These proceedings drove many into exile. Strype says, "The best prevention of these deaths and calamities was flight; which course many took, commending themselves to the mercies of the seas, and the compassion of strange nations, rather than to their own prince and country, and so preserved their lives, to do God and the realm service afterward. This the persecutors were much offended with; but seeing the professors were fled out of their bloody hands, they thought to be even with them, by endeavouring to hinder all supplies of money and

provisions to be sent to them ; saying, that "they would make them so hungry, that they should eat their fingers' ends." These words, Gardiner in a great passion had uttered in Calais, being there ambassador with Cardinal Pole and others ; but, notwithstanding, God so provided for them, that they enjoyed plenty of all things in the places where they came."

So far were the protestant pastors from exciting men to a vain-glorious desire for martyrdom, that they counselled all to flee, when they could do so, previously to their being singled out to make a public profession of their faith. In that case, they ever exhorted them "to stand fast and play the man." Thus many valuable lives were preserved ; among them Walsingham and other statesmen, who were bright ornaments of the reign of Elizabeth. And if among these, some were betrayed into bitterness of spirit, either against their persecutors, or towards some of their brethren, we must pity while we blame them, and there is no occasion to go into lengthened remarks thereon. Some of the exiles, who ventured into the dominions of king Philip, were seized and sent over to England. Among these was Sir John Cheke, who had been tutor to the late king. By threats and persecutions he was persuaded to turn to popery, but his conscience was burdened by his apostasy, and he sickened and died in a few months.

The spring of 1556 was inauspicious. Sickness was very prevalent ; and there was great dearth of corn. Discontent prevailed through the nation ; many persons were accused as traitors, and some suffered as such, which has just been noticed, although it was evident that they were really opposed to the queen's religion, rather than to her political power. The scarcity in the northern counties was increased by an order in the spring to call men forth to serve as soldiers, which was executed so as to interfere materially with the cultivation of the land.

The queen found her difficulties increase. The parliament unwillingly consented to some of her measures for the aggrandisement of the church, but they steadily refused to comply with her wishes to allow Philip some degree of kingly authority, and to stimulate the justices to greater activity in religious persecutions. Philip now had little inducement to return to England ; the

queen was much disappointed, and this contributed to render her more bitter in persecuting the professors of the truth. Her anxiety to enrich the church and supply her Spanish attendants with money, involved her in debts ; she then had recourse to forced loans, demanding large sums from all possessed of property. This excited against her many of her subjects who were indifferent as to religion. Libels were freely circulated, copies of which reached the palace, one was deposited on the desk in her closet.

Philip now had other and far more important interests than those which connected him with England. In October, 1555, the emperor Charles v., worn down by infirmities, had resigned Spain, Flanders, and all his hereditary dominions, to Philip. He retired to Spain, where he occupied apartments in a monastery, near Placentia, till his death, which took place in the year 1558. This brief interval appears to have been spent in unprofitable reflections upon his past life. He admitted the folly of the persecutions for religion caused by him ; but we do not read that he was sensible of the heavy weight of guilt they laid upon him.

Queen Mary, blind to her own personal and mental defects, attributed the absence of Philip to the dislike evinced by her subjects ; this rendered her still more disposed to govern with arbitrary severity, and made her anxious to find some pretext for getting rid of her sister Elizabeth, either by a foreign marriage, or by some darker device ; but the steady prudence of Elizabeth was so guided by Him who ordereth all things well, that she escaped the snares laid to entangle her. Turner well says, that "no life of any human being has ever hung on a more slender thread, during all this reign, than that of this princely sister, to whom the expressive intimation of the Vatican had so early and emphatically directed the attention of the queen, whom it governed, flattered, and misled. We cannot but admire the use to which Providence turns the conflicting devices of men, when we observe, that Philip deemed it his interest to protect the valuable life of this princess."

The French ambassador describes the wretched state of Mary. He says, "This princess always lives now in the two great extremities of anger and suspicion, being in a continual fury, that she can neither enjoy the presence of her husband, nor

the love of her own people." He adds, "I see no means by which she can ever be loved by her subjects," and speaks of "the great hatred of her subjects towards her." Let us remember that Mary was placed on the throne by the affectionate regards of her people, and let us observe that she lost this regard, by her endeavours to force the consciences of her people, and to subjugate them to the Romish priesthood. In one of his last despatches, in May 1556, this ambassador says, "To be secure in her residence here, she is forced to cause such a number of persons to die by the fire and the sword, and in all the extremity of the rigour of justice, that her people make a great clamour about it, being of opinion that these poor miserables who are led to so many punishments, all die innocent." Yet Mary might have ranked among the most popular sovereigns of England, had she not been absorbed by the withering mental slavery of popish superstition.

In September, the result of another unfavourable harvest began to be felt; disturbances in the markets were frequent. The autumn was also very sickly; many persons of note died. Amidst these troubles, the popular displeasure was farther excited by the public installation of Feckenham, abbot of Westminster, in November, who went in procession with his newly-shaven monks. This was an open proof of the queen's resolution again to set up monastic establishments. In the following month, the popish mumery of the childish processions of the boy-bishop called saint Nicholas, was renewed; the reception given him served for a test as to the religious sentiments of the people at whose houses he called, while many disorders were committed by his followers. Another procession this month exhibited the new abbot of Westminster, preceded and followed by his "sanctuary men," some who had taken refuge in the abbey to avoid the just punishment for their crimes. He was followed by three others who had been guilty of murder, "and thus was the abbey restored to its pristine privileges." Even a prisoner who had escaped from the Tower, was protected there, though claimed by the privy council. But there was no protection for those accused on account of religion!

At the end of this year, wheat was sold at forty-four shillings the quarter, and afterwards at forty-six shillings, a sum equal to twelve or fourteen pounds at the

present day. The year 1557 was begun by a strict examination or visitation of the universities of Oxford and Cambridge, that popery might be re-established more firmly in those seats of learning. At the latter place, Pole was lauded for his proceedings. The coffins containing the dead bodies of Bucer and Fagius were dug up and burned. New statutes were enjoined, but the master of Clare-hall being asked whether he would have a copy upon paper, or the more durable material, parchment, said that the slightest possible material would last as long as these statutes would continue in force.

At Oxford there were no buried remains of foreign protestant teachers, but the same poor spite was displayed, by removing the decayed body of the wife of Peter Martyr to a dunghill. The same absolute submission as at Cambridge was exacted from the living, but many looked forward, hoping for better times.

In February, another searching commission was issued, appointing commissioners authorized to procure or extort information by any ways or means, and giving power to punish by any inflictions thought proper. It was, in effect, setting up the Inquisition in England. More sufferers were sent to the stake, while the fell sweep intended to be made, was plainly shown at Colchester, where search was made in every house; for, as the inquisitor said, "This place is a harbour for all the heretics, and ever was;" a favoured distinction which history shows that town enjoyed in the early days of Protestantism. Twenty-two persons, fourteen men and eight women, were apprehended: they were pinioned together, and driven to London like cattle for the slaughter. Bonner was to have despatched them, but this wholesale method of proceeding attracted too much notice. The prisoners arrived at Fulham attended by above a thousand persons, who accompanied them from London encouraging them. Pole was alarmed, Bonner did not consider it safe to proceed, and the prisoners were dismissed upon signing a general promise to submit to their superiors. Bonner was checked for allowing them to escape, and before long, several of them were again apprehended and burned. Tye, a popish priest of Colchester, complained to Bonner, that they were bolder than ever. He said:—"They assemble together upon the sabbath-day, during the times of Divine service, in private houses, and there keep their

conventicles and schools of heresy. The rebels are stout in the town of Colchester. The ministers of the church are hemmed at in the public streets, and called knaves; the blessed sacrament of the altar is blasphemed and railed at in every house and tavern; prayer" (he meant Latin prayers) "and fasting are not regarded."

The importunity of Mary prevailed upon Philip to visit England once more. He arrived on March 20, and was received at court with great rejoicings. The Spanish monarch was engaged in war with France: the queen was desirous that he should be assisted by England; but her council repeatedly refused to concur in such a course. At length they unwillingly consented. In June, war was proclaimed against the French; thus another evil was added to famine and pestilence. Eight thousand men were levied and sent to join the army of Philip, who returned to the continent early in July. His forces gained a victory at St. Quentin, but without any important result.

The sickness continued. Ann of Cleves was one of those who died this autumn. However, the dearth was succeeded by a plentiful harvest; the price of corn fell rapidly to five shillings a quarter, equal to about thirty shillings of our money; and the size of the penny loaf in London was increased from eleven ounces to fifty-six; to such vicissitudes the nation was continually exposed, till a better system of husbandry and more freedom for trade were established.

Paul iv., before his elevation to the papacy, had been on ill terms with cardinal Pole: the latter also remonstrated against his political proceedings towards Philip, which so displeased the pontiff, that he revoked Pole's commission as legate, appointing a priest named Peyto to be cardinal and legate in his stead. The queen would not allow her favourite to be thus treated, and the new legate was forbidden to enter upon his office.

The principal events of this autumn, were popish processions, solemn interments of many persons of note, and frequent burnings of protestants. But an occurrence of greater moment was at hand.

Strype records:—"On January 10, 1558, heavy tidings came to England, particularly to London, that the French had won Calais; which was the dolefullest news and the heaviest taken that ever had happened, for traitor-like, it was

said to be sold and delivered unto them. The duke of Guise was chief captain. Every man was discharged the town, carrying nothing with them." The circumstances attending the capture of this place, which the English nation regarded with the most intense interest, were as follows. Calais was strongly fortified, and very difficult of access on account of the marshes by which it was surrounded. By an ill-judged economy, the garrison was usually diminished at the commencement of winter; this was done in 1557, although there was war between England and France. A well-concerted plan was arranged, by which the out fortifications, being feebly garrisoned, were easily carried. Contrary winds prevented the arrival of succours, and the governor, lord Wentworth, deemed it necessary to capitulate. Thus, with less than a week's siege the French regained Calais after it had been in the possession of England 210 years. The vain-glory of the nation was severely hurt by this loss, which rendered the queen as hateful from her proceedings of general polity, as she was for her persecutions and oppressions at home. The remembrance that Calais was lost in consequence of a war undertaken solely to please and assist Philip, rendered him more hateful than ever to the English nation. England was also threatened on the north, but a national jealousy of the Scots against the French induced the northern nobles to refrain from invading their neighbours. There was more probability of an invasion from France, which occasioned alarm, and expense in protecting the coasts. The loss of Calais was partly occasioned by a dislike to the measures of the queen. Wentworth and his garrison were evidently not anxious to preserve the possessions of a queen so opposed to the real interests of her subjects. Their defence was feeble. Calais was surrendered in less than a week after the attack began; it was, at least, "wilful negligence," as an old historian remarks. The general feeling was further shown by the refusal of the council to accept the co-operation of Philip to attempt to regain the place, so long esteemed "the key of France." All the efforts against that kingdom were, a useless expedition along the western coast of France, and some aid from English shipping to the Spanish army in a battle near Gravelines.

The disgrace of losing Calais, with the evident dislike of her subjects, deeply affected Mary, who was further pained by

the neglect with which Philip treated her; for he seemed less and less inclined to revisit England. Mary must have been further mortified by the pleasure which the pope expressed at the capture of Calais by the French, a needless piece of ingratitude, not to be expected from one to whom she had sacrificed herself and the best interests of her nation. The queen could not help seeing that she was hated at home, and despised abroad. Her health gradually but rapidly failed; she told her attendants that if her body were opened, Calais would be found written on her heart. Her confidence was fixed upon cardinal Pole, and he too was fast sinking to the grave. Yet the last months of this wretched persecuting queen, and her equally wretched minister, showed no relaxation of their bigotry. A proclamation against heretical books directed that all who ventured to retain such works in their possession should be reputed and taken for rebels, and executed without delay by martial law. Yet thousands of volumes still exist, which were then so prized for the declarations of gospel truth they contained, that the possessors ventured to encounter the dread penalties of this sanguinary decree, rather than give them up. There were congregations which still dared to assemble for the purpose of worship. Several were detected and many suffered, while some hair-breadth escapes of others are recorded. They met like the faithful of old in dens and caves of the earth, in lofts, in cellars, in the fields, on board vessels, and wherever they could hope to avoid discovery. These congregations increased towards the end of the queen's reign; then, as at other periods, "the blood of the martyrs was the seed of the church."

Gatherings were made "for Christ's prisoners;" sometimes ten pounds were collected at a night meeting. On one occasion a spy gained admittance, who was converted by the truths he heard, and besought the pardon of those he had purposed to betray. Similar meetings were held in various parts of England. The wretched state of the nation is thus described by Strype:—"Hot burning fevers and other strange diseases began in the great dearth, 1556, and increased more and more the two following years. In the summer, 1557, they raged horribly throughout the realm, and killed an exceeding number of all sorts of men, but especially gentlemen and men of

great wealth. So many husbandmen and labourers also died and were sick, that in harvest time, in divers places, men would have given one acre of corn to reap and carry in another. In some places corn stood and shed on the ground for want of workmen. In the latter end of the year, quartan agues were so common among men, women, and young children also, that few houses escaped, and these agues were not only common, but to most persons very dangerous, especially such as had been sick of the burning fevers before. In 1558, in the summer, about August, the same fevers raged again, in such a manner, as never plague or pestilence, I think, saith my author, killed a great number. If the people of the realm had been divided into four parts, certainly three parts of those four should have been found sick. And hereby so great a scarcity of harvest men, that those which remained took twelve pence for that which was wont to be done for three pence. In some shires no gentleman almost escaped, but either himself, or his wife, or both, were dangerously sick, and very many died; so that divers places were left void of ancient justices and men of worship to govern the country. Many that kept twenty or thirty in their houses, had not three or four to help the residue that were sick. In most poor men's houses, the master, dame, and servants were all sick, in such wise, that one could not help another. The winter following also, the quartan agues continued in like manner, or more vehemently than they had done last year. At this time also, died many priests, so that a great number of parish churches, in divers places of the realm, were unserved, and no curates could be gotten for money. All which, and a great many miseries more, now lying upon the nation, and the loss of Calais not the least, looked like the frowns of God upon the queen and her government. And in the midst of these calamities she expired. And she that wrote herself by her marriage, queen of so many kingdoms, duchess of so many dukedoms, marchioness of so many marquises, left less riches in her coffers and wealth in her realm, at the time of her death, than any of her progenitors did."

As queen Mary drew near her end, she was aware of the approach of death, and "carried herself very devoutly. She prepared herself for death after the

manner of the popish superstition wherein she had been bred; for she devoutly called for and partook of the sacraments of the church. After she had received her supposed Saviour, the wafer, the extreme unction was administered to her; and she repeated the psalms of the office without book, as the priest read them. When the strength of her body was quite wasted, and the use of her tongue failed her, yet in mass time, when the sacrament was to be elevated, she lifted up her eyes towards it: and at the pronouncing of the benediction, she bowed her head, and soon after yielded up her spirit. The sickly queen held out to the month of November, when on the 17th day thereof, she ended her life to the great joy of the poor professors of the purer religion, who had been sufficiently harassed by some of her zealots, that shed abundance of innocent blood, and set a stain upon the Marian days which will never be wiped off."

Thus, in the forty-third year of her age, and the sixth of her reign, Mary departed without being desired, having, in that short period, effectually alienated her subjects, and left an impression upon the minds of Englishmen, with reference to the intolerant and persecuting spirit of the Romish faith, which all the arts of sophistry and misrepresentation exercised by the votaries of that church during nearly three hundred years, have not been able entirely to remove. The feelings of the people were soon shown. On the afternoon of the day on which she expired, the bells were rung, bonfires were lighted, and tables were set in the streets, that all might publicly rejoice. Such was the popular feeling towards her who had just gone to her awful account. Burnet well says, "God shortened the time of her reign for his elect's sake; and He seemed to have suffered popery to show itself in its true and natural colours—all over, both false and bloody, even in a female reign, from whence all mildness and gentleness might have been expected—to give this nation such an evident and demonstrative proof of the barbarous cruelty of that religion as might raise up a lasting abhorrence and detestation of it."

Cardinal Pole only survived Mary a few hours, he died on the following day. Enough respecting him has already been recorded; it only remains to be said, that neither he nor the queen stayed the persecutions when they felt their deaths

approach. Bonner did pause in his career a few days before the decease of Mary; but in Pole's diocese the piles blazed to the last, three men and two women being burned, at Canterbury, on November 15th.

We cannot be surprised at the effect produced upon the minds of the people by the events of this reign; for, during six years, or rather during the last four, not less than two hundred and eighty-eight persons were burned alive, merely on charges connected with their profession of religion, while more than a hundred others perished in prison. These sufferers were persons of every rank and calling; they have been classed as follows:—Five bishops; twenty-one divines; eight gentlemen; eighty-four artificers; one hundred husbandmen, servants, and labourers; twenty-six wives; twenty widows; nine virgins; two boys; two infants. Many others also suffered as traitors, who took no part in the attempts against the queen's government, but were in reality only sufferers for religion. Thousands suffered pecuniary loss, or were contented to sacrifice their property for conscience' sake. No other reign can be pointed out as presenting such a list of victims. But thus, "by a way that she knew not, and though her heart intended it not, neither did she think so," Mary was one of the chief instruments in establishing the protestant faith in England firmly in the hearts of the people.

THE EXILES OF ZILLERDALE.

A PARTICULAR account of the persecution and exile of the protestants of Zillertal or Zillerdale in the Tyrol, is about to appear in a work translated from the German; but our readers will meanwhile be interested by the following extracts from a narrative of the whole affair which has lately appeared in the "Quarterly Review," where several documents are given for which we have not room.

The accounts of the expulsion of the Zillerdale Protestants from Austria, present to us the popery of the nineteenth century, and afford a very clear idea of the nature of the system, and of the effect which it produces upon crowned heads, and statesmen subject to its influence. The accounts themselves come from unquestionable authority. But indeed enemies themselves do not deny the

fact that more than four hundred harmless inhabitants of the Tyrol have been forcibly expelled from their homes and possessions, simply because they refused to remain in the communion of Rome: and to the consideration of this one fact we request the reader's attention.

In going from Salzburg to Innsbruck, after advancing more than two-thirds of the way, not far from Rattenberg and Schwatz, the traveller sees spread out before him, between two majestic masses of rock, a wide and lovely valley. It is watered by a clear and abundant stream, which, issuing from the southern Alps, falls into the Inn a little below Strass, and gives the valley its name. Very nearly in the middle is situated the town of Zell, the seat of a Landgericht and the residence of a dean. The vale presents alternately rich and meadow heavy arable land, and is dotted over at small intervals with villages of handsome white cottages, farm-houses, manors, chapels, and churches with lofty towers and spires—everything to make it dear to its children—an earthly paradise, that might have been the abode of bliss and peace, if the demon of religious falsehood had not found his way into it, and taught persecution. The population, amounting from 15,000 to 16,000 souls, and distributed into fourteen pastoral stations or districts, get their living chiefly by agriculture and the breeding of cattle. The poorer class go in summer into Styria and Carinthia, where they are employed in felling trees, and some labour in the works and manufactories of the Lower Innthal; but this periodical migration, though convenient, is not necessary, as they could all find a living without quitting their own valley. Extreme poverty is nowhere to be seen, and a common beggar is a rarity. In comparison with other valleys land is dear; "a farm of three cows," barely yielding corn enough for the consumption of the proprietor, fetches 3,000 florins; whereas, in the Upper and Lower Pnitzgau, a farm of ten or twelve cows, with a proportionate complement of arable land, might be had for the same money. The people themselves are strong, healthy, and well-made, though not remarkable for beauty. Good nature and honest simplicity are expressed both in their countenances and the hearty salutation with which they greet the traveller; and a more intimate acquaintance con-

firms the correctness of the first impression. Their religion was, until a few years ago, without any exception, Roman Catholic, and the ecclesiastical jurisdiction divided between the bishops of Brixen and Salzburg—the Ziller forming the boundary of the two dioceses.

In this valley, and amongst this population, it was that protestantism, without any act of external aggression, and without any outbreak of individual zeal or internal heat, suddenly appeared, as the prophet says of righteousness, to spring out of the ground, and, almost before it was noticed, had attained a vigorous maturity. Not a single protestant place of worship or protestant community was to be found in the whole region round about. A century before, the archbishop of Salzburg, count Firmian, by the help of dragoons and gendarmes, had robbed the protestants of their money, their landed property, their wives and children, and driven them half-naked over the frontiers; and it seemed as if protestantism in every form had been banished for ever from the neighbourhood. But the Roman priest and his soldiers, in their haste to expel the heretics, had left them no time to take the cause of their heresy, their religious books, with them. Copies of Luther's translation of the Scriptures, and sundry protestant devotional tracts, especially Schaitberger's letter to his countrymen,* remained behind, and in due time presented to the eyes of the astonished Romanists some hundred worthy successors of the Salzburg exiles. Some of the old folio Bibles had bound up with them the Augsburg confession of faith.

When once the good leaven had begun to work, various circumstances accelerated and extended its influence. The Tyrolese are accustomed to travel; many visit Bavaria. There and elsewhere some formed acquaintance with protestants; visited their churches and devotional meetings; read their books; conversed with them upon religious subjects; and then returned into their native valley with their protestant impressions confirmed, and bringing back fresh supplies of Bibles and religious books, such as Arndt's True Christianity,

* Schaitberger was one of the Salzburg Lutherans, driven away by count Firmian's persecution. Though only a miner, he addressed a letter of consolation to his brethren, the power of which is still felt in his native country.

Spangenberg's Sermons, Hiller's Treasury, etc. etc. On their return, they conversed with their countrymen; their ideas of religion gradually developed and assumed a definite form; and a considerable number, scarcely conscious of the process by which the change was effected, found that their faith was no longer that of the modern church of Rome. Many felt scruples about assisting at the celebration of mass, taking part in the religious processions, or paying homage to the images of saints; others abstained from frequenting public worship; and at length some heads of families determined to take the legal steps for a public profession of protestantism: the first of which was to send in their names as persons desirous to receive "the six weeks' instruction."

According to Austrian law, every person baptized within the pale of the Romish church, who desires to join a protestant communion, must first submit to be instructed in the popish doctrines, during six weeks, from two to three hours every day, by a priest, that his change of religion may not be the result of ignorance. If the catechumen still persist in his intention, the priest gives a certificate of his attendance on this "instruction," with which he goes to the civil magistrate, who gives the so-called "meldezettel," that is, a written permission to frequent protestant worship. Without the priest's certificate, the magistrate cannot grant the permission, and without this written permission, no one, bred a roman catholic, dare be present at protestant worship, or be received into a protestant community. During the six weeks of instruction, the law regards the catechumen as roman catholic; and in case of sickness it is the priest's office to administer the sacraments. Such is the Austrian idea of liberty of conscience, concerning which romanists still make such a noise in this country. They would prove their sincerity much better by endeavouring to procure for protestants such toleration in Rome, Spain, and Austria, as they themselves enjoy here.

The members of the reformed churches in Austria are still in a state of miserable oppression. The roman emperors of the house of Austria observed the articles of the Westphalian peace with a truly roman veracity. These articles promised liberty of conscience, free toleration, public worship for protestants; and

yet, in 1709, Charles VI. issued a law for Silesia, forbidding any one to become a protestant on pain of banishment and confiscation of property; and up to 1781, in some parts of Austria, protestant worship was forbidden, and a protestant clergy unknown. The edicts of Joseph II. permitted public worship, a protestant clergy, churches, schools, consistories, and liberty of embracing any of the tolerated confessions; that is, those of the Lutheran, the Calvinistic, and the Greek churches. This was no doubt a change greatly for the better; but the protestants still have to bear with patience much that would, in this country, have produced open rebellion. It is unlawful to build protestant churches with towers, bells, or an entrance from the street; in fact, with any appearance of a church. Protestants are obliged to pay the roman priests not only the tithes, but the dues for baptism, marriage, and burial; and it is the romish priest who keeps the official register of births, deaths and marriages. The roman clergy have the right of intruding into the chamber of the sick protestant; but protestants are not allowed to converse with their popish fellow-subjects upon religious topics. Unless there be one hundred protestant families, or five hundred souls, the erection of a congregation is unlawful.

Such is the Austrian law, and such the popish idea of toleration now. But, miserable as it is, even this niggardly measure of religious liberty was most unjustly withholden from the Zillerdalians. The known, and written, and public law of Austria was basely violated, not by a tumultuous mob, or a fanatic priesthood only, but by the hereditary and official guardians of the law.

In obedience to the law, nine men of irreproachable character, inhabitants of the villages of Ramsberg, Hollenzen, Mairerhof, etc., applied in the summer of 1829 for the six weeks' instruction. Some of the priests, especially Gottsamer, then dean of Zell, since dead, endeavoured at first, by fair and gentle means, to dissuade them from their purpose; others dealt more harshly; but, when it was evident that these persons had fully determined to renounce popery, and the number of applicants for the six weeks' instruction continually increased, the clergy came to one common resolution to refuse it, until they should receive directions from their superiors at Innsbruck. The matter was accordingly

communicated to the government by the two ordinaries, who approved the measure adopted by the clergy, and entered a formal protest against the erection of any protestant worship in the district. The consequence was, that, a year after the application, the official of the local government gave, contrary to the law, a direct refusal to those who, according to the law, had sent in their names as candidates for the six weeks' instruction. These nine inhabitants of Zillerdale had made known their will in the mode by law prescribed; it was therefore a base and unworthy shuffle, a mere trick of might against right, to pretend that any new permission was necessary.

This gross injustice, however, neither shook the resolution of the applicants, nor prevented an imitation of their example; for in 1832, the number of those who declared their determination to forsake popery had increased from nine to two hundred and forty persons, chiefly shepherds, artizans, labourers; some few farmers and freeholders. At this time the late emperor Francis arrived in the Tyrol, and had an opportunity of hearing the wrongs of the Zillerdalians from their own lips. They sent a deputation, consisting of three eminently respectable heads of families, to present a petition to his imperial majesty at Innsbruck. Their request was apparently too moderate to be denied. All they asked was to be associated as a filial congregation to some already-existing protestant community, and to be visited two or three times a year by a protestant pastor. The deputies were admitted to an audience, and were received by the emperor with his usual courtesy and condescension. After reading the petition, the following conversation occurred:—

Emperor. Who is it, then, that disturbs you in your religion?

Deputies. The clergy.

Emperor. What, then, is your belief?

Deputies. We believe the word Holy Scripture, according to the principles of the Augsburg confession.

Emperor. But surely you believe in Christ as well as I? In Italy there are people who do not even believe in Christ; that grieves me much.

Deputies. Yes, we believe in Christ as our Lord and Saviour, and only Redeemer; but the people in Zilleralthal will not allow us to say so.

Emperor. The Catholics have no right to trouble you, or use ill language to you,

any more than you have to do so to them. Formerly the Lutherans were not suffered over there in Saltzburg; but things are altogether different now. I use religious compulsion towards none. But how did you come to your present opinions?

Deputies. We have Bibles amongst us, which are more than two hundred years old. My grandfather, who lived to the age of ninety-eight, and died only three years ago, was accustomed to read the Bible from his childhood; my father likewise, and I too; and thus it has been with many. The doctrine was instilled by their parents.

Emperor. Probably some remnant of the Saltzburgers was left behind. Were you Saltzburgers?

Deputies. Yes; we formed a part of the Saltzburg territory until sixteen years ago.

Emperor. You are determined, then, not to remain in the Catholic church?

Deputies. Our conscience does not permit us without practising dissimulation.

Emperor. That I do not wish. I will see what can be done for you.

When the deputies, at parting, expressed their hope that he would not forget them, nor believe any slanderous reports concerning them, his majesty made answer, "I will not forget, neither will I believe anything bad of you."

This conversation shows the view which the emperor Francis took of the law of the case. He evidently thought that they had a perfect right to profess protestantism, if they pleased, and was disposed to administer the law with equity. Pity that he was as weak as he was amiable, and that the keepers of his conscience were men who could prove that to keep no faith with heretics is the bounden duty of every true son of the church.

The anti-protestants of the valley, meantime, were not idle. They sent counter-deputations, and presented counter-petitions, praying that no religious divisions might be permitted.

There was an influence paramount to that of law and justice, which triumphed over both, and inflicted upon the Zillerdalians the grossest oppression. The refusal to grant them the six weeks' instruction, and the withholding of an answer to their complaints, plunged them into the greatest difficulty, and exposed them to all sorts of petty vexations, as

well as violation of their conscience. Not being allowed to separate, they were compelled to send their children to the parish churches to be baptized, and thus to lay upon their necks the yoke of Rome.

Once baptized in the roman church, they were considered to be roman catholics, and therefore, as soon as they were old enough, compelled to attend roman catholic schools, and to receive the religious instruction there communicated; and in some cases, as the sacrament of the Lord's supper is there given to children of eight and nine years old, to receive the wafer, and thus join in an act which the parents considered contrary to Christ's institution—in that worship of the wafer which the book of Common Prayer pronounces to be "idolatry, to be abhorred of all faithful Christians." The attendance at the schools also was rendered as unpleasant as possible. The heretics themselves were anathematized, and their persons so accurately described, that the school children could not help recognizing a father, a brother, a friend, or a neighbour. The children of the papists enjoyed the sport, and laughed at the confusion and grief of their protestant playfellows; and after school ensued quarrels and fights; so that at last many of the latter refused to go to school, and then the parents were charged with disobedience to the constituted authorities. In one school the zealous master went so far as to divide the children into two classes—Christian children and Devil's children; the latter, of course, containing none but the children of those inclined to protestantism.

Another annoyance, which perhaps some may be more easily disposed to view in its due light, was the refusal to allow these people to marry. Not having been allowed to make a public profession of protestantism, they were not permitted to celebrate marriage according to the protestant rites; and, being considered as heretics, they were denied the nuptial benediction by the priests of Rome. How men, professing to be Christian statesmen, could prefer the risk of introducing immorality rather than grant the liberty which the laws of Austria guaranteed; but, above all, how any persons calling themselves ministers of Christ could wish to punish Christians with one of the worst features of savage life, is truly inconceivable. It is another sad evidence of the tendency of popery to harden the heart against the

dictates of morality as well as of humanity; and it is most ungenerous in the writers of popish theological journals to charge the Zillerdalians with a disregard of the sanctity of marriage, when their own diabolical bigotry alone prevented them from entering into that holy state of wedlock; and highly creditable it is to the morality of protestantism to be able to state that, during the eight years of their oppression, not more than two or three cases occurred of persons living together without the priestly benediction. Had many yielded to the temptation, to whom must the sin and misery have been justly ascribed?

The priests, however, were not content with these means of forcing the stray sheep back. Both in the pulpit and in the confessional they warned their flocks against holding any intercourse with the heretics, and forbade the poor to accept of them an alms, or a night's lodging. Nay, they would not allow the dead even the semblance of a Christian burial. According to the Austrian law, where protestants have no burial ground of their own, they are allowed a resting place in that belonging to roman catholics, may have the nearest protestant minister to accompany the funeral procession, have the bells tolled, and erect a tombstone; but to the Zillerdalers this was refused. When one of their community died, if he had land of his own, there he was buried; if he had not, a place was looked out for him in a neighbouring wood. In neither case were the mourners allowed to offer up a prayer, or to sing a hymn at the grave; and in both, the policeman and his dog were the only officials in attendance. The poor people were particularly grieved and indignant at the presence of the dog, which seemed to refer to the *sepultura canina*; and the most ignorant and the dumbest could perceive that a religion which adds insult to injustice is not the religion of the New Testament. The inability to pay respect to the dead was, however, forgotten in the keen sense of want of all means of edification for the living. They had no schools for their children, no temple for themselves. All religious meetings were strictly prohibited. Their Bibles and their books were their only resource, and even of these the priests endeavoured to deprive them. They conscientiously endeavoured to instruct their children and their households as well as they could; but to such of them as were only

labourers or artisans this was difficult. Three of the most learned, Heim, Fleidl, and Gruber, tried to compensate for this deficiency by diligently visiting the scattered protestants, and communicating what they could in conversation. Some did at first visit the roman churches rather than be altogether excluded from public worship; but the furious, and damnatory, and personal addresses from the pulpit soon compelled them to stay away; and the same cause prevented the conferences which the priests held with them from being of any use. After a conference at Hüppach, which had lasted for several hours, and in which the people ably defended their faith from the word of God, the priest concluded with these words: "I only wish that the Lord Jesus Christ himself might come into the room, that I might say to him: These are the people—make an end of them by casting them into hell-fire."

(To be continued.)

FALL OF THE LEAF AND DESCENT OF THE SAP.

THE principles of wear and waste, renovation and renewal, are in continual operation in the economy of every thing that lives. It would, no doubt, have been possible for the Almighty Creator, if he had seen meet, so to clothe the grass of the field, that it might have maintained an unchanging verdure without withering or perishing, for years or even centuries, living on like the giant oak or the cedars of Lebanon, beyond the memory of the oldest individual of the human race. This, however, is not the plan of the organized creation. All is subject to gradual and constant decay; and for the purpose of retarding this from ending in speedy death, every living plant and animal is furnished with appropriate food to renew what is lost, and repair what is decayed in the system; the worn and decayed parts being cast off as no longer of use, to give place to the renovated parts fresh produced by the admirable contrivances adapted thereto by Divine wisdom. One of the most striking illustrations of the general fact just mentioned, is the well-known phenomenon of the falling of the leaves of the sort of trees called deciduous, as distinguished from the sort termed evergreens, a phenomenon to the consideration of which this paper will be devoted; but it may not be irrelevant to notice some

analogous circumstances which occur amongst animals.

To begin with ourselves: it must be obvious to every one that the human body wears, and one proof of this can scarcely have escaped the observation of any one. On combing the hair, a great number of white scales fall from the head; and in wearing black stockings, they are found to be covered on the inside with scales similar to those combed from the head. These scales are portions of the thin and insensible cuticle or scarf-skin (*epidermis*) which has been worn and detached from its place. In the heads of infants, these scales sometimes become glued together by the matter of perspiration, and adhere again to the skin in the form of a blackish grey crust. In all the interior parts of the body, the same process of wearing is going on as has just been exemplified in the case of the skin; but as the scales, or minute portions of fluid, cannot be thence removed, like the scales of the head, or the sweat of the brow, a system of vessels, called by anatomists the absorbents, is contrived to act the part of scavengers, and clear the body of its waste. These absorbents are found in all parts of the body, running like the veins in the direction of the heart, and uniting in a common canal, which enters the vessel that carries the digested food into the blood, where all the refuse and waste of the body collected in their course is emptied. This waste must accordingly pass into the blood; and it is carried with it directly to the lungs, and removed by the breath and the bowels. The breath and the bowels thus become loaded with much impure matter carried off by the process, just described, from the blood, while it is circulating through the lungs and the intestines.

In quadrupeds, besides this process, there is the shedding of the hair at stated periods, in colder countries, at the commencement of winter, for the purpose of giving room to a closer and warmer coat of fur to protect the animal from the severity of the weather; a most remarkable and beneficial provision, to which there is a striking analogy in the falling of the leaves, and formation of buds, in some sorts of trees.

In birds, the analogous moulting of the feathers annually takes place, the old and worn plumes being pushed from the skin, by the advancing growth of the new ones, a phenomenon that does not occur

all over the bird at once, but goes on gradually for some weeks, the bird appearing sickly and dull till the process is completed.

In reptiles and the larvæ of insects, as well as in spiders, crabs, lobsters, prawns, and shrimps, instead of the process being gradual, it is performed at once, the whole skin, or external covering, being sloughed off in one piece; pushed off as in the case of the bird's feathers by the advancing growth of the new skin. This process is strictly similar in the smallest caterpillar and the huge boa constrictor, one of which lately cast its skin at the Surrey Zoological Gardens; and after five months' entire abstinence from food, as soon as it came forth in its new skin, it devoured, at one meal, four rabbits and a sucking pig.

One of the nearest analogies is that of young animals shedding their milk teeth to make room for the more enlarged and numerous teeth of adolescence, the jaws being, at the same time, elongated, as are the twigs and branches of trees. When the new layer of wood begins to harden, the rise of the sap through it is checked, and consequently, towards the end of autumn, little or no sap rises, while all the pulp formed in the leaves, (by a process described in a former paper in the *VISITOR*,) and the watery vapour imbibed from the atmosphere descends.

When the vessels in the leaves accordingly are not supplied and filled with fresh juices, they shrink in dimensions, and the leaf loses its bright green colour from a deficiency in the formation of carbonaceous matter. This shrinking of the vessels is greatest at the part where the leaf stalk is attached to the branch, partly from their forming an angle, more or less acute, and partly from the pressure of the nascent bud as it swells in growth. The effect of this swelling of the bud, on the insertion of the leaf-stalk, is very obvious in some of our commonest forest trees, such as the ash, (*Fraxinus excelsior*,) and the aspen, (*Populus tremula*;) the end of the leaf-stalk, in the fallen leaves, being distinctly hollow, like a carpenter's gouge, on the part which has been pressed by the swelling bud, while, in consequence of the pressure, the descending sap being obstructed in its downward flow, the vessels containing it enlarge and bulge out the parts into a sort of knob. As the bud continues to enlarge, the pressure increases so much that the vessels are

wholly obstructed, and no more descending sap being admitted to nourish them below the point of obstruction, they shrink at this point, and ultimately die, the leaf being from this cause detached and thrown down.

The reader who has attentively considered the preceding detail, will at once perceive that the popular notion of cold being the cause of the fall of the leaf is altogether erroneous. So far is this from being the case, that the leaves of the ash, the poplar, and some other trees, fall sooner, when the weather sets in hot in September and the beginning of October, which is by no means an uncommon occurrence. At the same time, it is equally well known that though cold is not the leading cause of the fall of the leaf, the occurrence of a sharp frosty night will cause leaves to be more readily detached, which have had their vessels already obstructed at the base of the leaf-stalk by the swelling of the bud; a circumstance which may be accounted for from the juices in the bulged portion of the base of the leaf-stalk being frozen, and consequently enlarged in volume, it being a well-known effect of freezing to increase the bulk of watery fluids, such as the sap of plants. So great, indeed, is this effect, in some instances, that in very severe frosts, the juices in the interior of trees, on being frozen, actually cause large cracks in the wood as if done by a wedge.

But although cold is not the immediate cause of the fall of the leaf, it is very certain that in tropical climates the deciduous trees of temperate climates do not shed their leaves, but remain evergreen; that is, the swelling bud which obstructs and cuts off the descending sap, does not, as in temperate climates, remain for the winter months in the state of an unexpanded bud; but immediately expands into a fresh leaf to supply the place of the one which has been detached, and hence the tree is never left naked of foliage. At St. Helena, accordingly, and in other warm climates where the English oak has been introduced, it becomes, from this cause, an evergreen. For the purposes of forcing in such warm climates as in India, an artificial fall of the leaf is effected by uncovering the roots of the trees during the violent heats; the supply of sap from the roots being thence rendered inadequate to the moisture expended by evaporation from the leaves,

the vessels at the base of the leaf-stalks are left empty and shrink, as has been already explained.

One remarkable circumstance, which proves the above explanation of the swelling of the bud at the base of the stalk, causing the fall of the leaf, is, when gardeners observe in their cuttings, that the leaves wither and remain, they conclude such cuttings to be dead, or at least incapable of striking; whereas, on the other hand, when the leaves drop off at the part of the cutting nearest the ground, they think success is more certain, because this indicates the due absorption and circulation of sap, and the swelling of the bud at the base to form a fresh leaf.

In trees, such as the holly, (*Ilex*), whose juices are thick and glutinous; and in others, such as the fir, (*Pinus*), whose juices are resinous, no regular fall of the leaf takes place till the new wood is formed; and hence such trees are never bare of leaves, but remain evergreen throughout the year.

It is another popular notion, though this is also erroneous, that the fall of leaves is a consequence of their withering. This notion is easily disproved; for if a fresh branch with its leaves be detached from a tree, and kept till these leaves wither, it will be found, that so far from the leaves having any tendency to fall, they adhere more firmly in their withered, than they did in their living and fresh state. This may be seen in the case of currant-tree branches, whose hearts have been eaten out, during summer, by the mining caterpillars of a small moth, (*Sesia*), and in the case of the boughs of trees struck by lightning.

The leaves which fall from the trees, on being rotted till they are resolved into mould, constitute one of the best manures for enriching the soil; and this indeed forms a natural top-dressing, as a gardener would call it, for the woods and forests where it occurs, and no doubt was intended, by an all-wise Providence, for this especial purpose. It is the long continuance of this, for an indefinite series of years, which has rendered the soil of America so rich, as in some parts to be apparently inexhaustible by successive cropping. In Australia, on the other hand, where the trees are all evergreen, with dry and scanty foliage, the land is destitute of this rich annual top-dressing, and is consequently by no means so fertile as in America.

The opinions of botanists and vegetable physiologists with respect to the descent of the sap in trees, immediately before winter, are various and conflicting. Some authorities adopt the popular opinion, that when the cold weather comes on, the greater portion of the sap, in the body and branches of the tree, descends to the roots, where it is conserved till the spring, and rises again on the return of genial weather. Others deny this, and say there is no descent of the sap at the commencement of winter, any more than at other seasons; nay, that there is manifestly less, inasmuch as less rises, because warm weather is required to raise it; and also, because the increasing hardness of the wood prevents its rise. If, therefore, less rises, less must descend.

It would be taking too much upon ourselves to decide which of these opinions is the most correct; for the truth is, we are very much in the dark as to the course of the sap, and its distribution in plants, difficulties presenting themselves on every side, forcibly reminding us of the weakness of man's fallen nature, and the inscrutable things of God in the works of creation.

J. R.

THE MEMORABLE PLAINS OF TROY.

THE poetical idea of the plains of Troy, the arena of Homer's battles, is frequently disturbed in passing the flat, sandy, and marshy ground, by seeing its present inhabitants; the buffalo, with all but its head immersed in the swamps; the heron feeding in the shallow streams; and the frogs, whose voices certainly vary more than that of any other animal, sounding at different times like crying children, barking dogs, pigeons, and crows; and when in great numbers, producing a harmony almost as agreeable as the singing of birds. On the banks or sandy places the helpless tortoise is crawling sleepily along, and as we pass, timidly draws in its head. They are so numerous that I often turn my horse out of the way to avoid them, although doubtless their hard shell would sufficiently protect them from injury. The dead ones lying about lose their outer shell, and become perfectly white, of a limy bone, with the horny scales scattered around.—*Fellows*.



The Dog-headed Opossum.

THE DOG-HEADED OPOSSUM.

IT is well known, that with the exception of the wild dog, or dingo, all the mammalia of Australia belong to the marsupiate type. All, it is true, have not an abdominal pouch, like the kangaroo, for the reception of their young; but all possess the marsupial bones, and, besides, present in common, certain characteristics in their anatomical structure, which serve as a line of separation between them and the rest of the class. That the dingo should be an exception, in this respect, among the mammalia indigenous to this remarkable country, has led, and with reason, to the belief, that it is to be regarded in the light of an imported animal, which, at some distant period, has in fact been introduced by man; perhaps by the earliest colonizers of the land; and that it has spread a race of descendants, which have been led by instinct and circumstances, to resume their natural independence. In short, we conceive the case of the dingo to resemble that of the wild cattle and horses which abound in South America, and which are the descendants of a stock imported into that country by the early Spanish settlers. If this view be correct, then the dingo can scarcely be regarded as a genuine Australian production. The order *Marsupialia*, as established by Cuvier, is composed of groups characterised among themselves by a great

diversity of forms, manners, and instincts; and in this point of view, therefore, cannot be regarded as a natural order; that is, as an order the subjects of which are all allied to each other, by marked and decided features; it is not, for example, such an order as that of the *Rodentia*. Some are timid and gentle, feeding upon the herbage of the plains; some are arboreal, and feed indiscriminately on fruits, insects, reptiles, small birds, etc.; others are burrowing animals, and live upon roots, bark, etc.; others again are truly carnivorous, and display in their habits and manners the ferocity of the wolf or hyena. If the *marsupialia* were looked upon as constituting a class, (and this we are inclined to believe is the true light in which to regard them,) then might be established among them orders, to a great extent parallel to those which obtain among the rest of the *mammalia*. The *pachydermata* would not perhaps have their marsupiate representatives, and the *quadrumana* would also be without their parallel; but the *edentata*, the *ruminantia*, the *rodentia*, the *insectivora*, and the true *carnivora*, would have many representatives among the present singular group. To the marsupiate carnivora would be then referable the extraordinary animal figured at the head of this article; it is the dog-headed opossum, and constitutes the sole species as yet known of the genus *thylacynus*.

cinus of Temminck. In general aspect, habits, and manners, the dog-headed opossum (*Thylacinus cynocephalus*) is a wolf; indeed, the zebra wolf is one of the names under which it is known to the colonists of Van Diemen's Land, the stripes over the back suggesting the cognomen of *zebra*.

In size, this savage animal fully equals a half-grown wolf; its height at the shoulders being about one foot ten inches, and its total length five feet ten inches, of which the tail is about two feet. The head is large and muscular, and resembles that of a wolf, except that the ears, though erect, are rounded, and the mouth is cleft much deeper than in that animal, extending beyond the eyes. The teeth are large and formidable, the canines being upwards of an inch in length. The incisors are eight in the upper, and six in the lower jaws; the molars seven on each side, both above and below. The eyes are large, full, and black, having a nictitant membrane for their protection against the light of the sun; and their expression adds an uncommon degree of malignant ferocity to the general aspect of the countenance. The body is stout and muscular, but of an elongated contour, which is rendered more apparent by the shortness of the legs, which, however, are thick and strong. The toes are five on each foot before; the hinder feet are four-toed; the claws are black, short, and blunt; the tail is compressed, tapering to a point, and is covered with short smooth hair. The fur on the body is soft, somewhat short, and of a dirty greyish brown; on the lower part of the back run fifteen or sixteen black transverse stripes, broadest on the spine, whence they run to a point on the flanks and thighs.

The first notice of the dog-headed opossum, occurs in the ninth volume of the Linnæan Transactions, in a paper by G. P. Harris, Esq., and communicated by the Right Hon. Sir Joseph Banks. The writer of the paper alluded to, observes, that on dissecting one of these animals, the remains of a porcupine anteater (*Echidna hixtrix*) were found in the stomach. He observes, also, that "the history of this new and singular quadruped is at present but little known. Only two specimens (both males) have yet been taken. It inhabits amongst caverns and rocks in the deep and almost impenetrable glens in the neighbourhood of the highest mountainous parts of

Van Diemen's Land, where it probably preys on the bush kangaroo, and various small animals that abound in those places. That from which this description and the drawing accompanying it were taken, was caught in a trap baited with kangaroo flesh: It remained alive but a few hours, having received some internal hurt in securing it. It from time to time uttered a short guttural cry, and appeared exceedingly stupid and inactive; having, like the owl, an almost continual motion with the nictitant membrane of the eye."

Since this communication, which was made in 1808, little has been added to our information on the particular habits of dog-headed opossums. It is, however, decidedly nocturnal, losing in the congenial darkness of night the stupidity which is occasioned during day by the distressing glare of the sunshine. It now steals abroad in quest of prey, and makes havoc not only among the bush kangaroos, and other small animals, but among the sheep and lambs of the colonist. Its favourite haunts are the caverns and dark recesses of rocks which border the sea, and crustacea and shellfish are among its habitual food. It has never, we believe, been brought alive to Europe, nor indeed are its skins common in museums; most probably it is scarce in its native climate, or difficult to be obtained, owing to the remote and inaccessible nature of its haunts.

The scattered information which we have been able to glean respecting the habits of this animal, confirm the account given by Harris, and tend to prove that it is by far the most powerful and ferocious of all marsupial quadrupeds. It is, in fact, a marsupial wolf, having all the voracious propensities, and the cautious, crafty maners of that celebrated destroyer of the flock. As, however, the structure of its organs of vision sufficiently indicates, it is exclusively nocturnal, which is not the case with the wolf; for though the dusk of evening and the darkness of night are certainly favourable to his predatory excursions, he sees well by day, and in thinly peopled countries, hunts as boldly by day as by night. Not so with the dog-headed opossum. In solitude and in silence it slumbers in its obscure recess, till the day light is faded; then, rousing up from its lair, and shrouded by the gloom of night, it ventures from its retreat, and roams abroad; cautiously and without noise it steals on its prey, and

gluts itself with food. With the dawn of light it retires to its wonted haunts, and there sleeps away the time till night again recalls it to activity. M.

A GREAT CONQUEROR.

It was during the long revolutionary war, which is just coeval with my earliest recollections, that Arthur Longley, dashing into my uncle's study one morning, nearly an hour before breakfast time, exclaimed, "O sir, have you heard the glorious news? have you opened the papers?"

My uncle, who was not much accustomed to such interruptions at an hour which he usually devoted to reading, raised his eyes from his book with some expression of surprise, and quietly remarked, "You are up early this morning, Arthur. Pray what is the glorious news that has roused you before your usual time?"

"It was not the news, sir, that called me out; I took an early ride this morning to look at a pair of pointers which I think of purchasing; and in the town I met with the guard of the mail coach, who told me the glorious news that reached London yesterday, of"—pardon me, gentle reader, I have so little sympathy with Arthur's martial ardour, that I cannot distinctly recollect what the news was which so elated him; or whether the hero of the day was Baird, or Nelson, or Wellesley. I know my heart often sickened, when in connexion with those and other names of martial renown, I heard of "glorious victories;" cities stormed; ships blown up; thousands slain, wounded, or taken prisoners; provinces depopulated; sovereigns conquered or deposed; and all the dread, though brilliant, accompaniments of war and victory. Arthur felt very differently on these subjects. His whole soul was alive to martial exploits. He always seemed to identify himself with the hero; and while relating or reading an account of the battle, was as full of enthusiasm as if he had really been on the field.

On the occasion referred to, whatever it might be, he proceeded to inform my uncle, that the slaughter was immense, the victory complete, and the plunder immensely valuable. "It is altogether a most glorious achievement. Have you not opened the papers yet, sir? the guard tells me that the evening papers contain the despatches."

"The papers," replied my uncle, "will not arrive for more than half an hour yet; you forget your own early rising to-day, and fancy the world is behind-hand with you."

"No, sir, I am aware that I am rather earlier than usual; but it is a great shame that the letters should not be delivered by this time, especially on such an occasion as this.

"And if no such grand occasion existed, I suppose you would not think it a very great shame for letters and papers to wait in the breakfast room an hour or two before you made your appearance. Perhaps by the time you have unbooted and prepared yourself for breakfast, you will find the meal ready, the company assembled, and the arrivals of the post on the table." This gentle hint led Arthur to cast a conscious eye on his muddy boots and spurs, which he knew were not congenial to the library stair-case, and carpet, but which, in his eagerness to communicate the glorious news, he had entirely forgotten.

The newspapers, the first glance of which was politely conceded to Arthur, fully confirmed the statements of the guard, who probably had spent a few leisure minutes in informing himself of their contents. Arthur was so eager in his desire to make himself master of all the particulars, that he could scarcely confine his attention long enough to any one subject to get a clear understanding of any. As he hurried along the columns, he sometimes involuntarily read a line or two aloud, or uttered an exclamation; "Noble!" "Astonishing!" "Glorious!" "No soldiers in the world like the English!"

For a day or two Arthur seemed completely carried away with the subject, and was exceedingly indignant to learn that it was not intended to illuminate on the occasion: for his part he thought there had never been a victory that more loudly called for that brilliant expression of national joy, nor ever a commander who more highly deserved all the honorary and substantial tokens of approbation that the sovereign and senate could heap upon him.

When the effervescence of his feelings began to subside a little, my uncle Barnaby said to him, "Arthur, I think we have on record the exploits of a greater hero than even your present favourite."

"Indeed, Sir!" replied Arthur, "I cannot imagine to whom you refer.

Surely it must be to some of the heroes of antiquity, Cyrus, Alexander, or Cesar; we have nothing in modern history, certainly nothing in English history, to surpass the present achievement."

"Are you sure we have not?" said Frank with a smile. "What say you to the battles of Agincourt, Cressy, Poitiers, Blenheim, Ramillies?"

"Ah! true, true, we have had some noble heroes. Well, we will say that the present affair equals those in which they were engaged, and that the hero of the day has given us a pledge that he will outdo them all."

"And yet," resumed my uncle, "my hero attained still higher degrees of courage and conquest. Mine was a moral hero. His warfare was maintained on the principle recognized by Solomon, 'He that ruleth his spirit, is better than he that taketh a city,' Prov. xvi. 32.

Arthur looked rather blank at the turn given by my uncle to his warlike strain of conversation. The event of the day had so fully engrossed his mind as for the moment to eclipse all, even of its own character, that had gone before it; and I almost suspect that a feeling of incredulity, if not of contempt, arose in his mind when, for merely a good man, who might be a poor, unlearned, and in some respects, an insignificant man, was claimed a superiority over ancient and modern heroes of high renown.

The newspaper columns for several days were engrossed with the affairs of the seat of war. Official despatches and private details were read with equal avidity; and even those who were not quite so enthusiastic as Arthur Longley, agreed that a most brilliant triumph had been achieved by the British arms, and that the affair had terminated most disastrously for the enemy. The slaughter and destruction were immense; and the hostile power was said to be completely crippled, if not annihilated.

Arthur was not a hard-hearted boy; and though the brilliance of the victory had for a time dazzled his mind, and set him almost beside himself, he was not insensible to the aggregate loss of human life announced in the despatches, or to the details of individual suffering collected from private sources; and he sighed as he made the admission, that with all its glory, war was a dreadful thing, and that its total extermination from the face of the earth, was a consummation most devoutly to be wished.

"Yes," said my uncle, "all war, except that in which the Christian hero is engaged. Instead of being mighty to take cities and destroy armies, let men universally become mighty in subduing and ruling their own spirits; and then we shall have a peaceful and a happy world; and when the warfare is accomplished, and the victory complete, the triumph will be celebrated in heaven. At present the 'wars and fightings' that spread misery and devastation through the earth, originate in a want of self-government in those whose exalted station gives them power to influence the destinies of others. One great man offends another, or covets the title or the territory of another, and the offender must be chastised, and the insult revenged, or the invader repelled, though at the cost of ten, or twenty, or a hundred thousand human lives, the wretchedness of thousands of surviving families, and the devastation of the fairest provinces and countries. The same principle operates equally on a smaller scale. Because men do not rule their spirits, the peace of families is broken up, brother wages war with brother, and man becomes a wolf to man. 'From whence come wars and fightings among you? Come they not hence, even of your lusts that war in your members?' James iv. 1. And in the individual himself, the evil exists in its most concentrated form and most dire malignity. 'He that hath no rule over his own spirit is like a city that is broken down, and without walls,' Prov. xxv. 28. Without self-government, all that is good goes out and forsakes a man, and all that is evil breaks in upon him; he lies exposed to all the temptations of Satan, he becomes an easy prey to the enemy, as well as liable to many unnecessary troubles and vexations. Think, my boys, of the present condition of the conquered, the waste of life and property, the state of exposure, and privation, and wretchedness of the remaining inhabitants, the humiliation and disgrace of the regular authorities, the stagnation of trade and commerce, the increased liability to fresh incursions of a hostile kind, and whatever scenes and circumstances of desolation and horror imagination can depict, and then bethink you of the lively image which the scene presents of one who has no rule over his own spirit; the reverse of the moral hero, the moral sovereign over himself, who is greater than the mighty, more noble and valiant

than the conqueror of a city or an empire."

"I should like, uncle," said Frank, "to ask you two questions. What is the exact meaning you attach to a man's having rule over himself? and, Had you any particular character in view; or did you speak in general of the dominion which every good man attains?"

"I thought," replied my uncle, "of the apostle Paul, as an illustrious instance of moral courage and heroism, and as distinctly exemplifying the several particulars in which they consist."

"Ah! he was a noble character; but it seems almost like presumption for us to attempt to imitate him."

"Not at all. We very much err in habitually setting our standard of excellence too low, and in contenting ourselves with coming many degrees short of the characters we admire. Why should we be satisfied with attainments below those of the illustrious individual to whom we have referred? We have the same principles to actuate us, and the same grace to sustain us. You know he uniformly made the acknowledgment, 'By the grace of God I am what I am.'" 1 Cor. xv. 10.

"And do you think it possible for Christians in our day to equal him?"

"I can see nothing whatever to render it impossible, except it be our own low and degrading views of the matter. We certainly are not likely to attain excellence after which we do not aspire. Now just analyze the conquests achieved by that holy man, and then tell me which of them is not required of us, and, in the strength of Divine grace, attainable by us. His self-subjugation appears to me to have consisted in four particulars. First. He maintained an ascendancy over his intellectual powers. Formerly he had suffered his mind to rove in vain speculations, or to soar in lofty imaginations; he was vainly puffed up by his fleshly mind, carried away with philosophy and vain deceit, and accounted the cross of Christ foolishness; but he had learned to bring every thought into captivity to the obedience of Christ. Those things which he once most highly esteemed and in which he gloried, he now counted but dung and dross for the excellency of the knowledge of Christ Jesus the Lord. He no longer boasted of his own reasonings, but learned with meekness and humility to sit at the feet of Christ, and say, in the spirit of a little child, 'Lord,

what wouldst thou have me to do? What I know not, teach thou me.' He became a fool that he might be wise. He received implicitly the dictates of heavenly wisdom. His understanding, his perception, his judgment, were sanctified, elevated, and regulated by the dictates of his heavenly Teacher. Instead of cavilling at the mysterious, or murmuring against the humbling doctrines of salvation, his mind was brought into that humble adoring frame that led him promptly to repel all objections against Divine revelation with 'Nay but, O man, who art thou that repliest against God?' 'Let God be true, but every man a liar.' 'Oh the depth of the riches both of the wisdom and knowledge of God! how unsearchable are his judgments, and his ways past finding out!' Col. ii. 8. 18; 2 Cor. x. 5; Phil. iii. 8; Acts ix. 6; 1 Cor. iii. 18; Rom. ix. 20; iii. 4; xi. 33. "This," continued my uncle, "was an intellectual victory of no common order.

"Did ever mind of mortal race,
Cost thee more toil and larger grace,
To melt and bend it to obey?
'Twas hard to make so rich a soul submit,
And lay her shining honours at its sov'reign's feet.

Too many men, endowed with capacious and splendid mental powers, have not had the rule over their own spirits, have not submitted to the dictates of heavenly truth, but have suffered themselves to be led into the wanderings of vain speculation, error, and infidelity." My uncle mentioned Voltaire and some other philosophers and poets of that day. He might now have added to the list the names of more recent writers of powerful but unsanctified talent, who it is to be feared, perished themselves in the bewildering mazes of error and opposition to Divine revelation, and whose works are not less dangerous than brilliant.

"It is a great thing," my uncle went on to observe, "for a man to have a proper ascendancy over the powers of his mind, and to keep them well regulated and well directed in their exercise. In this respect, Saul of Tarsus had no rule over his own spirit, and his mind was like a city that is broken down, and without walls, its desolation and horror proportioned to its magnitude; but Paul the Christian was mighty to rule his spirit, and thus was greater than he that taketh a city.

"A second feature of the dominion of this moral hero over his own spirit, was

the control under which he held the irascible passions. Once he went 'breathing out threatenings and slaughter' against those whom he supposed to be in error, and who had adopted a cause against which he was hostile, 'and being exceedingly mad against them, he persecuted them even unto strange cities.' He 'was a blasphemer, and a persecutor, and injurious.' Acts ix. 1; xxvi. 11; 1 Tim. i. 13. He had no rule over his own spirit, but suffered it to break forth in violent and irregular passion. Within there were turbulence and restlessness, like the troubled sea which cannot rest, whose waters cast up mire and dirt; and his uncontrolled violence burst upon others with effects as mischievous as those of a sweeping hurricane or wild tornado. But by Divine grace he gained a victory over himself, and learned to rule his spirit. What a striking contrast does he exhibit! He who once persecuted to the death those who presumed to differ from him, now forbears the most innocent self-gratification that could be the means of wounding or grieving a brother. He spoke the truth firmly, but he spoke it in love. He rebuked, but it was in the spirit of meekness, considering himself lest he also should be tempted. He bore the infirmities of the weak, and in meekness instructed them that opposed themselves. He was gentle, patient, and forbearing towards all men; doing nothing through strife or vain-glory; esteeming others better than himself; looking not selfishly on his own interests, but on those of others, and in all things cultivating the mind and spirit that were in Christ Jesus. Rom. xiv., xv.; 1 Cor. viii. 13; Gal. vi. 1; 2 Tim. ii. 25; Phil. ii. 2—5. Oh what a lovely spectacle is a man to whom grace has given the mastery over his own spirit! But who can estimate the dreadful extent of evil that overspreads the world, arising from the want of this holy attainment?

"A third particular of successful self-subjugation in the example before us, consisted in holy ascendancy over all fleshly propensities. How noble was the self-control manifested in his high and consistent resolve, 'All things are lawful unto me, but all things are not expedient: all things are lawful for me, but I will not be brought under the power of any.' 1 Cor. vi. 12; x. 23. 'Every man that striveth for the mastery is temperate in all things. Now they do it to obtain a corruptible crown; but we an incor-

ruptible. I keep under my body, and bring it into subjection; lest that by any means, when I have preached to others, I myself should be a castaway,' 1 Cor. ix. 25—27. He constantly exercised himself to maintain a conscience void of offence, both towards God and man, Acts xxiv. 16. And he practised the moderation he inculcated; considering the shortness of time and the vast importance of eternity, to regard all earthly things as comparatively trivial and insignificant, and to use the world as not abusing it, 1 Cor. vii. 29—31. Was not Paul a moral hero? And is not such moral heroism as rare as it is valuable?"

"Indeed it is, uncle," replied Frank, "how often we see persons of good understanding and education, and even of professed piety, who really seem incapable of exercising self-control or self-denial in reference to the most paltry gratifications, and who act as if life consisted in mere animal gratification."

"It is a lamentable and a disgraceful fact. Such persons, whatever they may profess, have not rule over their own spirits, and are like a city broken down and without walls. Aspire, my dear lads, to the noble superiority which the holy apostle attained; and while you use the good things of life with moderation and gratitude, take care that you be not brought under the power of any. Well, there was one more feature—or, rather, it was the one pervading principle in the successful self-government of the noble Christian hero to whom we have alluded. It consisted in a determined and entire consecration of himself and all his powers and possessions to their legitimate and noblest end. The honour of a governor consists not more in dislodging enemies and subduing rebels, than in well regulating the subjects and resources of the state. This noble hero, not only vanquished his lusts, and subdued his angry passions, and crucified his pride and self-righteousness; thus surrendering whatever was opposed to the dominion of his rightful sovereign; but he also consecrated and regulated all he was and all he had to the promotion of the Divine glory. He considered himself as not his own, but bought with a price, and bound to glorify God both with his body and spirit, which were God's. The love of Christ constrained him; and the one great object that he constantly kept in view was this, that Christ might be magnified in his body, whether by life or by death.

With a noble heroism he encountered perils, and endured hardships, and sustained labours unparalleled, and said of them all, 'None of these things move me; neither count I my life dear unto myself.' He pursued his conflicts and his triumphs to the close of life, and shouted victory with his latest breath, 'I have fought a good fight, I have finished my course.' 'In all things we are more than conquerors, through Him that loved us.' 'Thanks be to God, which giveth us the victory through our Lord Jesus Christ. Henceforth there is laid up for me a crown of righteousness, which the Lord, the righteous Judge, shall give me at that day: and not to me only, but unto all them also that love his appearing.' Phil. i. 20; 2 Cor. v. 14; 1 Cor. vi. 20; Acts xx. 24; 2 Tim. iv. 7, 8; Rom. viii. 37; 1 Cor. xv. 57.

"And, now, what say you, Arthur? does not a moral hero outshine the conquerors of the earth?"

"Yes, sir, no doubt he does in one sense; but that is not what I was thinking of; the taking of a city, or a great victory, is quite a different thing."

"Quite different; but passing events may sometimes be improved by comparing or contrasting them with things that are very different. You claim for your martial hero whatever is great, and good, and honourable. Hence I take occasion to claim for my moral hero something greater, and better, and more honourable. If the conversation produces the end at which I am aiming, it will lead us all to admire and imitate that moral excellence which all may attain. Now, have you thought at all why the moral conquest is better than the martial one?"

"I suppose," said Frank, "because it is moral. Moral excellence must needs be better than material excellence."

"True," replied my uncle, "that is certainly the primary reason; but there are several modifications of it which may be worth our notice. The moral hero is better than the martial hero, because the conflict he sustains is more arduous. It is much easier to slay an enemy than to control a passion or subdue a lust. Samson, who slew a thousand Philistines with a jawbone, yielded up the dominion of himself, was carried captive by base lusts, and lost his honour and his life. Even David, who wrestled successfully with a bear and a lion, and with ease overcame the gigantic champion of Philistia,

for want of self-control, was foiled by those fleshly enemies which war against the soul, tarnished his laurels, sacrificed his peace of conscience, and gave occasion to the enemies of the Lord to blaspheme. Samson and David, and many other eminent men of strong passions, have testified from bitter experience that they found it a much more arduous and difficult task to maintain the rule over themselves than to conquer a city; and that, therefore, the conquest, if attained, was the more honourable."

My uncle's remark led me to recollect several youthful feats of dexterity, agility, and persevering exertion, which had gratified my own vanity and excited the admiration and emulation of my companions, while I felt conscious of having often given way to irritations of temper. I remembered my mother hearing me boastfully and pettishly contend with my brother about the height of a leap or the length of a walk I had taken, and saying to me, "Ah, Samuel, it would give me more pleasure to see you striving to conquer your vanity and irritability of temper, than to see you jump over the walnut tree, or to know that you had walked fifty miles at a stretch without fatigue. To walk, or run, or leap requires only animal strength and agility, and make what attainments you may, the hare, the camel, and the antelope will far excel you. But to conquer an evil temper calls into exercise the noblest powers of the man and of the Christian."

My uncle proceeded to observe, that the moral conquest was better, as the conflict was more protracted. "A battle," said he, "requires the exercise of martial courage for a day or an hour only; but the Christian's warfare calls for the exercise of moral courage through life. It is not the performance of an astonishing feat in a time of extraordinary excitement, but a constant, persevering struggle to put down, as soon as it rises, and keep down every improper feeling; never to relax our vigilance, or slacken our exertions on account of any supposed advantage gained, never to imagine the battle decided until the complete victory is actually achieved, never to become weary and discouraged, however tedious the conflict, but still to fight on, vanquishing one enemy after another, until, as it was with the Canaanites of old, they are subdued and expelled by little and little, Deut. vii. 22, and in the strength of Divine grace we set our feet on the

neck of the very last corruption that rises to oppose the government of our King."

"Ah!" said Frank, with a sigh, "that is the hardest part of the struggle, that when we think we have gained some ground against ourselves, the evils that we thought we had subdued, spring up again as strong and as mischievous as ever. It is not like the thousands of poor creatures that Arthur tells us of, who fell during the battle. *They* do not come to life to be conquered again and again."

"True, Frank, the Christian's work is not done once for all. He has to go on struggling day after day, the strife is always beginning till the victory is achieved; but then recollect, that as the conflict is more arduous and protracted, the victory is more honourable. Well, then, the moral hero has to fight personally and single-handed. When we speak or read of a splendid victory obtained by a great general or admiral, we never for a moment imagine that he achieved it personally and alone. We mean that it was achieved by the commander at the head of some hundreds or thousands of his fellow-countrymen, who, perhaps, fought quite as bravely as their leader, and endured hardships, and encountered dangers to which he was not exposed. In many instances, the toil and suffering have been theirs, and the honour his. But he whose heart is set on self-conquest, must fight his own battles; nothing of this kind can be done by proxy. Christian friends may warn, and excite, and encourage, and thus assist him in the conflict, but the work must be his own. Even the communications of Divine grace, without which we could never conquer one of our spiritual foes, are given, not to supersede, but to stimulate, and direct, and give efficacy to our own exertions: 'Blessed be the Lord my strength, which teacheth my hands to war, and my fingers to fight,' *Psa. cxliv. 1*. 'Work out your own salvation with fear and trembling. For it is God which worketh in you both to will and to do of his good pleasure,' *Phil. ii. 12, 13*. Now, do you not think it is a greater honour for a man personally to put to flight or crucify his evil propensities, and acquire and maintain the rightful dominion of himself, than for a general to reduce an army, or take a city by taking the command of others?"

We all agreed that it was; and we thought that perhaps some unknown private, who perished on the field of battle,

might have actually done as much towards the success of the day as the great officers whose names were blazoned with honour in the public prints.

"Yes," said my uncle, "and in the moral and spiritual warfare, such honour have *all* the saints. Then, again, the moral victory is better, because nobody is injured by it: 'Every battle of the warrior is with confused noise, and garments rolled in blood,' *Isa. ix. 5*. And when we hear of cities demolished, and armies routed, and spoils taken, it is heart-sickening to think of the miseries inflicted on the vanquished. Think what numbers of lives have been sacrificed; think how many who yet survive are suffering excruciating and lingering torments in wounds and loss of limbs; how many wretched widows and orphans are left desolate; how many are stripped of their all, and plunged into destitution. Did it not occur to you, when those wagon-loads of treasures were carried through London with so much triumph, that the spoils by which England was enriched, had impoverished those from whom they were forcibly taken?"

"Yes, uncle," I replied, "it always makes me sorry when there is an illumination for a victory. When I was a very little boy, I remember poor Mrs. Harris telling me that every lamp was lit with a sigh; and that, if we could see the misery that was inflicted, we should be much more disposed to weep over a victory than to cry Hurrah. Since we have been talking of this victory, I have been looking in my writing master's 'Chronological Tables' for accounts of some of the other great battles that have been mentioned, and all of them tell the same melancholy story. It made my heart ache to cast up the number of thousands that perished on the field of battle, or died in consequence of the ravages of war."

"Well, nothing of that kind attends the conquests of the moral hero. If all mankind would set themselves in good earnest to subdue their evil tempers and propensities, and to gain the rule over themselves, not one drop of blood would be shed, not one pang be inflicted, not one sigh be extorted, not one person, in any respect, rendered less happy. These conquests harmonize with universal happiness, and in proportion as they are carried on and extended, misery will be banished from the world, and earth made to resemble heaven."

My father had a much admired print,

"The Death of General Wolfe," which I always looked at with horror and pity: the dying warrior was supported by his friends, and raising his languid eye as they pointed to one bearing the enemy's colours, and shouting victory. I mentioned the feelings of sadness which this scene awakened in my mind.

"Yes," said my uncle, "many a victory has been sullied by the death of the hero; but that is never the case in the Christian warfare. The Christian soldier never perishes on the field. In his battles he neither inflicts nor receives death, except on sin; and when death comes, and finds him still faithfully fighting under the Captain of salvation, it is the harbinger of complete victory. Then he will never have another battle to fight—another foe to encounter. We have often heard of a city being taken and retaken by the enemy: every conquest spreads devastation and misery; but there is no saying how long the dearly-purchased dominion will be held. But the Christian hero, like his great Captain, goes on conquering and to conquer; and when once the final victory is obtained—

'Sin, his worst enemy before,
Shall vex his eyes and ears no more;
His inward foes shall all be slain,
Nor Satan break his peace again.'

Now it is thought a glorious thing for the news of a victory to be published in the papers for a few days, and the towns in a single empire to be illuminated for a single evening; but there are thousands and thousands of people who never hear of it at all; there are perhaps as many who bewail as rejoice over it; and in a little time it passes away, and is forgotten as a topic of conversation. But the triumph of the Christian hero will be celebrated in presence of an assembled universe, and the glory of it will last for ever and ever. Yes, in every respect, and from first to last, the humble Christian is the greatest hero. I hope and pray, my dear boys, that you may all be enabled to fight the good fight of faith, and lay hold on eternal life. Remember, if you do not conquer sin, it will conquer you, and work your everlasting ruin. Remember, too, you must resist, not in your own strength, but be strong in the Lord, and in the power of his might; and whatever may occur, either to allure or discourage you, never forget the animating promises which have cheered the hearts of the soldiers of the cross in their

sharpest and longest conflicts: 'Be thou faithful unto death, and I will give thee a crown of life,' Rev. ii. 10. 'To him that overcometh will I grant to sit with me in my throne, even as I also overcame, and am set down with my Father in his throne,'" Rev. iii. 21. C.

OLD HUMPHREY IN HIS OLD QUARTERS.

ONCE again am I settled, for a short season, in my old quarters. Once more is Old Humphrey a guest at the Old Court on the borders of the Wye! It is enough to make me feel proud in my old age to receive the attentions that I do receive; and I doubt not that I should be very proud, only that a feeling sense of my manifold infirmities is sanctified by Divine grace to keep me humble. To be in good health at my time of life, to walk abroad with a firm step, to see the sun shine in my path, and to receive the kind-hearted civility and respect of those around me, my daily wants being well supplied, and my nightly slumbers tranquil. These are precious things, and they make me cry out in the overflowing of a grateful spirit, "Goodness and mercy have followed me all the days of my life!"

The Old Court is just the same as when I last left it; the door covered with studs of iron is yet standing; the clustering ivy still peeps through the stanchioned windows, and the coats of arms and ancient pictures hang up in their wonted places against the walls of the great hall. Two pictures have been lately added to the collection; the one, a painting of a favourite old horse, and the other a representation of two capital rams: these, by their freshness, throw sadly into the back ground the venerable resemblances of the fat pig and the Herefordshire prize ox.

Some change has taken place among the domestics; for Evans and John, the groom, both valuable servants, are married. They are, however, closely attached to the household, and a cottage is being fitted up for them on the premises. George Hodges and Samuel Smith work as hard as they used to do, and Mary Brian, married to George, is, in her cottage, as stirring, tidy, and industrious as ever.

The sheep and the cattle seem to thrive, and the hay and corn stacks in the rick yard speak of plenty; the seed has not been cast into the furrow in vain, for God has been gracious and

given the increase. His sun has shined upon the earth, and his clouds have dropped fatness. "O give thanks unto the Lord; for he is good: because his mercy endureth for ever," Psalm cxviii. 1.

While noting down my poor thoughts, I am seated in an apartment fitted up as a boudoir for one who now is, through mercy, as I humbly yet confidently believe, the tenant of a glorious habitation! Here has my young friend bowed her knees in prayer, and raised her voice in praise. She has sat where now I am sitting; she has gazed from these ivy-clustered windows on the outer court, the pigeon-house, the gardens, and the homestead. The sun has shined upon her, and the silvery moon has given her light in this beautiful apartment: but the starry pavement of the skies is now beneath her feet. She needeth neither the light of the sun nor moon now; for the Lamb is the light, and God the glory of her heavenly dwelling place!

Most people love the spring and the summer, and it would be an odd thing indeed, if they did not; for the goodness of God is in such seasons so liberally showered down upon the earth, that hard is the heart that does not then take up its parable of praise, its song of thanksgiving! My very spirit dances for joy at times, when the green leaves of spring and the blushing fruits of summer await my gaze. Yet still I do much prefer autumn. Ay, and the fag-end of autumn too, if it may so be called for a moment, just to set forth my meaning. I do greatly prefer the fall of the year to any other season. It is hardly worth while to tell you why; enough, that it harmonises with my spirit, and gently reminds me that my life, like the year, is drawing near its close.

I love dearly to get into the country when the October winds are beginning to blow over the woods; just in time to pluck the ripe blackberry, to gather the last nut, as it hangs frailly on the slender spray; and to pick up the last fresh milk-white mushroom of the season!

An hour ago I had a ramble round the fields and found so many sources of enjoyment, that they make me gravely question the lawfulness of living in the city while country scenes communicate to me such an intensity of joy, and so abundantly fill my heart and my mouth with praise. Call you this season dull?

Why the earth is, even now, rich to prodigality, and the bright shining of the sun blinds me as he flings from the skies more glory than the kings of the earth can gather around their thrones. The wrinkles of my brow and the grey hairs of my head are at variance with the buoyancy of my spirit. My heart is as young as ever when I gaze on the glorious creation!

You would smile to see me in my rambles; my feet well shod with a thick strong pair of country hobnailed shoes, and my legs defended with substantial gaiters, provided me by the friendly inmates of this hospitable habitation. Every hill and valley, wood and field, hedge-row, bank and ditch, yielding me gratification. The odd language of the peasants at their labour, ploughing and sowing, harrowing and rolling, have an interest with me. I return the salutation of one, and hold a conversation with another. Some cheerful remark, and yet withal striking and likely to awaken a profitable reflection, I strive to drop by me here and there, in the fields, or in the cottages, as the case may be. And often a tract is given that may do good when I am far away, and for years to come. When a cup is full, it is apt to run over; it is just the same with the heart.

I love to look at the fresh green holly bush abounding with its red berries, at the high grass and dry fern on the sloping ridge, at the sere leaf of the wild plum, and the long straggling blackberry-bearing bramble. The blackthorn "armed at all points" is a goodly sight; nor less so the gorgeous red and yellow poisonberry plants; the ivy covering the hollow oak; the dry reeds whispering in the winds; and the fleecy, feathery flower called honesty, profusely covering the hedge-rows. God is good not only to the bird and beast, but to the creeping thing also; the caterpillar, the sharded beetle, and the spider, have a goodly inheritance. In one field, I find a solitary magpie or a crow, and in another, little less than a thousand rooks; while, now and then, a hundred or two of pigeons whirl over my head, turning full to my view the silver whiteness of their rapid wings. Pleasant it is to pluck the scarlet hip and nibble at its shining surface, and still more pleasant when the air has created me an appetite, to select from the field of my host a fresh turnip, round and sound, to pare off its rind and to find it firm

and white, short to the teeth, and sweet to the taste.

The sources of interest and pleasure, profusely scattered in my path, are, like my mercies, manifold: they are more in number than the hairs of my head. But of created objects the all glorious sun is by far the most arresting. Every night he sets opposite the tall projecting window of the great hall in the Old Court House; but I have got up into the knolly field to witness the gorgeous spectacle of his retiring from the skies. A wide expanse of country is there spread before me, hill and valley, woods and distant mountains. Old Humphrey has not yet learned to gaze without emotion on the bright ambers, the snowy whites, the beauteous blues, the blushing reds, and the glowing crimsons of an evening sky. Last night I was standing on my favourite spot when the king of day issued from a cloud, careering like a conqueror, along the western sky, while the silvery and golden clouds crowded his chariot wheels. At one time, he hid his face, pouring his rays through the dark shadows around him, seeming to rend them with his beams; and then, again, he burst forth with resistless splendour, lighting up the heavens with bewildering brightness. I hid my face with my hands in joyous emotion; and while the tears trickled through my fingers, my secret spirit adored his Almighty Maker.

Some call the end of autumn the fall, and some the fall of the year, while others usually gave it the name of the fall of the leaf. None of these are bad names; but the proper term appears to me to be the fall of the leaves, seeing that the leaves which do not fade and fall are quite an exception to the general rule.

I cannot look on this fall of the leaves as a mere natural effect, only brought about by certain palpable causes. I regard it as a merciful expression of God's condescending goodness to his creatures, bringing before them, from time to time, the solemn subject of their brief existence. We require to be reminded that we "dwell in houses of clay, whose foundation is in the dust, which are crushed before the moth," Job iv. 19. and that "we all do fade as a leaf," Isa. lxiv. 6. The setting sun, the dying daylight, and the gathering darkness, all enforce the same solemn truth, yet are they not enough profitably to impress our minds.

I have been standing under a tree at the skirt of a wood, and while musing on the things around me, every now and then a withered leaf has fallen from the branch where it grew, and dropped at my feet. These dry leaves speak eloquently not to my ear only, but to my heart. Three of my old friends in this part of the world have fallen since last year I left this venerable mansion, yet here am I! Can you wonder that the sere leaves cry aloud to me, "The time is short." Even the young would do well to reflect on these monitors of their Creator; but an old man must be blind indeed not to regard them. "Lord, make me to know mine end, and the measure of my days, what it is; that I may know how frail I am. Behold, thou hast made my days as an handbreadth; and mine age is as nothing before thee: verily, every man at his best state is altogether vanity," Psalm xxxix. 4, 5.

THE MOUNT OF OLIVES.

THE mount of Olives will ever be the favourite resort of the Christian traveller in the Holy Land, when he wishes to drink in the inspiration of the place, and to draw wisdom from the instructive pages of its eventful history. We will pass over Kedron, and tread on this holy ground. In all other parts of the city, there is doubt, and in too many disgust; but when standing upon this famous eminence, it is as if we listened to the words of some messenger of truth, furnished from heaven with sure and certain evidence of his high commission. There have been those who have doubted of the truth of prophecy; but let them accompany us in our present exercise, and they can doubt no more. "Doubt no more," did I say? Nay, they may still doubt; for men in this very spot have doubted of miracles that they saw performed with their own eyes; and prophecy is only the standing miracle of the present and future ages of the church, that grows in power as it grows in years.

When we read the account given by Josephus, of the immense stones that were used in some parts of the city, borne out by the words of the disciples, "Master, see what manner of stones, and what buildings are here!" and then turn to the language uttered by our Saviour in reference to the same, "Seest thou these great buildings; there shall

not be one stone left upon another, that shall not be thrown down;" we almost tremble to think, lest the words of the prophecy should have been overcharged in the fervour of inspiration, and lest we should find, upon a personal examination of the facts, that they are in some degree contrary to the declarations of Scripture. Our fears may cease, for nothing can be more true. We know from undisputed authority, that the prophecy was literally fulfilled at the siege of Titus; and looking now on the city as it lies beneath our feet, we cannot point out one single building, or part of a building, not even so insignificant a ruin as two stones together, that the most zealous antiquarian can suppose to have existed in the time of Christ. Other cities have been sacked and partially destroyed; but the ruin has not been total. I have seen the Parthenon at Athens, the Colosseum at Rome, and there are temples still standing even at Thebes; here rage has done its worst, and there is no present edifice over which the Jews can weep and say, Our fathers reared these walls. The sepulchres alone have come down to our time; but they are hewn out of the rock and not built, and it is only with the stone that contains them they can perish. So pitiless has been the angel of destruction, as he swept from the face of heaven the guilty city, so complete the exercise of his commission, that were it not for these certain memorials, we might almost doubt the identity of the place; and for this purpose, what could be more appropriate than tombs, once consecrated by affection and tears; but now stripped of their love tokens and ornaments, and thrown open to the careless tread of the passing traveller!

The site of Jerusalem is peculiarly adapted to have appeared in beauty, when its hills were terraced after the manner of the East, and were verdant with the olive, the fig-tree, and the vine; but that which was then its beauty now adds to its deformity; and the bare and blasted rocks seem to say that God in his anger has passed by, and cursed the city for its sins. There are rocks, but they have no sublimity; hills, but they have no beauty; fields and gardens, but they have no richness; valleys, but they have no fertility; a distant sea, but it is the Dead Sea. No sound is now heard, but that of the passing wind, where the audible voice of Jehovah once

spoke in thunder; the sky is now cloudless and serene, where the angel of the Lord was once seen in glory; the paths are now deserted, where the tribes once approached from the most distant parts to the festivals of the Temple—the old man and the venerable matron, and the beloved son and the beautiful daughter, weeping for very gladness as they came: and in that city, where once was the monarch, his brow encircled with the golden diadem, and in his train the noble and the wise, there is now no higher power than a delegated governor, and its own people are the most despised of men.

There is no part of the city that has not its own separate history, each of which is without a parallel. Upon that distant mount, Titus encamped, and it was there that his active mind planned the stratagems of the siege. Upon that nearer plain, the Egyptians, Assyrians, Persians, Greeks, and Romans, the caliph of Mohammed, the Christian crusaders, the Saracens, and the Turks, have all encamped in battle array, and displayed their banners before the sun. The guilt and the woes of the city itself are of too awful a description to be written in words. The aggregate of its groans, and tears, and blood, is too immense to be calculated. Death has here held his richest festivals, and has called with glee to his crimson banquet, the dog from the plain, and the worm from the earth, and the vulture from the sky. But it was here, too, that death was overcome, and the victory wrested from his fatal grasp! In some part of that area, Jesus Christ suffered for our sins. We must not for a moment associate his sufferings with that of the sinful men who have here perished; he suffered in our stead; but we are not to look upon the thorns of his crown or the nails of his cross, as the sole ministers of his sorrow. He gave his soul an offering for sin. Without prying with too curious an eye into the particulars of place or pain; enough is it for me, that my soul was there ransomed, and that I may now be cleansed from all sin by his blood. No city upon earth has been so guilty as Jerusalem, yet it was here that our Lord offered himself as a sacrifice for rebellious man; and when the offers of salvation were commanded to be made to all the world, so far from any being excluded from the hope of forgiveness,

it was here, in the centre of iniquity, that the apostles were told to begin the exercise of their gracious commission. Who then need despair? The history of the Temple alone would detain us long to trace the whole of the events we know concerning it. It was the place chosen by God for the placing of his name. On that spot, the Temple rose in silence, ribbed with cedar, and adorned with gold, and the glory of the Lord filled its courts. In the splendour of its worship might once be seen the priest in his gorgeous robes, and the various vessels of untold value. The solemn ritual, the swelling music, the grateful incense, and the prayers of a thousand votaries, ascended from thence to heaven. The sacrifice was there slain upon the altar, an emblem of "The Lamb of God that taketh away the sins of the world." Its treasures were the ark of the covenant, with the rod that budded, the pot of manna, the brazen serpent lifted up in the wilderness, and a copy of the law. There were also the Urim and Thummim, the sacred fire upon the altar lighted from heaven, and the Divine presence in the holy of holies. In that court, Solomon offered up his consecration prayer, and blessed the people, "with his hands spread up to heaven;" and along its paths, kings, and priests, and prophets, and apostles, and martyrs have come to supplicate before the Lord. In after times, when this erection had been destroyed, amidst the opposition of the enemy, another edifice was built about which we have this affecting testimony: "Many of the priests and Levites and chief of the fathers, who were ancient men, that had seen the first house, when the foundation of this house was laid before their eyes, wept with a loud voice; and many shouted aloud for joy: so that the people could not discern the noise of the shout of joy from the noise of the weeping of the people." Though in metals and gems, the glory of this latter house might be less than that of the former; in essential glory it was far greater, for its courts were visited by "God manifest in the flesh." In the siege under Titus, the Temple was the principal scene of battle from its great strength. The Roman general was wishful to preserve it, but God had ordained otherwise, and a soldier having thrown into it a lighted brand, it was speedily consumed. It was then *their* house, forsaken by God.

The sun still shines upon the same spot, and there is a temple, a book, and worshippers; but the temple is a mosque of the false prophet, the book is the Koran, and the worshippers are the haughty Moslems. "The ways of Zion do mourn, because none come to her solemn feasts: all her gates are desolate. From the daughter of Zion all beauty is departed. She spreadeth forth her hands, and there is none to comfort her. Is this the city that men call the perfection of beauty, the joy of the whole earth?" There is a voice comes from the ruin, and whispers of hope, and tells us of happier times. The restoration of the Jews may not take place in all that fulness that some have supposed; but we cannot doubt that the city, now "trodden down of the Gentiles, until the times of the Gentiles be fulfilled," in a spiritual sense, at least, will arise again from the ashes, and be as a queen among men; the now rejected Saviour will then be received as the Messiah, and the now despised Israelites will be among the honourable of the earth. Let us therefore pray for the prosperity of Jerusalem; for they shall prosper that love her.

The mount of Olives, is, if possible, still more interesting in the details of its story. There are yet a few olive trees that maintain their ground; though in nation, language, and religion, their owners have once and again been changed. Some of them appear very ancient, with gnarled branches and hollow trunks, and though not so old as Christianity, they may be lineally descended, by not more than one remove, from the trees that here flourished when Christ trod upon the same spot. In this direction, David retired from the city on the rebellion of Absalom, with the priests and the Levites bearing the ark of the covenant of God. "And David went up by the ascent of mount Olivet, and wept as he went up, and had his head covered, and he went barefoot: and all the people that were with him, covered every man his head, and they went up, weeping as they went up." This mount was the favourite place of retirement to our Saviour and his disciples from the noise and distraction of the city, of which we have many evidences in the Gospels. "As he sat upon the mount of Olives, over against the Temple, Peter and James and John and Andrew asked him privately, Tell

us, when shall these things be?—At night, he went out, and abode in the mount that is called the mount of Olives.—Jesus went unto the mount of Olives.—And he came out, and went, as he was wont, to the mount of Olives.” In passing to Bethany, where Jesus appears generally to have lodged during his visits to the city, he would have to cross this mountain. It was probably along that path, which still leads from the village, that he rode in triumph, attended by acclaiming thousands; and at that turn in the road, where the city in all its magnitude bursts at once upon the sight, that he wept. “When he was come near, he beheld the city, and wept over it, saying, If thou hadst known, even thou, at least in this thy day, the things which belong unto thy peace! But now they are hid from thine eyes.” Beneath us is the garden of Gethsemane. Let us here kneel meekly upon our knees, for it is sacred ground. Here Jesus prayed, and, “being in an agony he prayed more earnestly, and his sweat was, as it were, great drops of blood falling to the ground.” In such a place, how deep appears the love of God, how unfathomable the mystery of our redemption, how infinite the debt of our gratitude; but how cold our own affections, how earthly our desires, how languid our efforts, how small the sacrifices we are willing to make for Christ!

“And shall we then for ever live
At this poor dying rate?
Our love so faint, so cold to Thee,
And thine to us so great!

“Come, Holy Spirit, heavenly Dove,
With all thy quickening powers;
Come shed abroad the Saviour’s love,
And that shall kindle ours.”

Above us is the place of the Ascension. “And he led them out as far as to Bethany, and he lifted up his hands, and blessed them. And it came to pass, while he blessed them, he was parted from them, and carried up into heaven.” Then they returned unto Jerusalem, from the mount called Olivet, which is from Jerusalem a sabbath day’s journey. The heavens received his glorified form from the sight of his sorrowing disciples, and he is now seated at the right hand of the throne of God, “to be a Prince and a Saviour, for to give repentance to Israel, and remission of sins.” We cannot now look upon the actual body wounded for our transgressions; but we can come boldly to

the throne of grace, and receive freely, without money and without price, the pardon of sin, and be filled with all the fulness of God.

We may now retire from this memorable position. It appears to us as if invested with attributes that are not of earth, like some land that is midway between earth and heaven, the story of which obtains an equal prominence in the records of angels as in the perishing pages of our own poets and historians. It has been said of the reflective mind, that it “finds tongues in trees, books in the running brooks, sermons in stones, and good in every thing.” And admitting the general truth and beauty of the sentiment, we may ask, what trees can discourse with such eloquence as the venerable olives in the garden of Gethsemane? what brook unfolds a volume like that of Kedron, and what stones can preach sermons so powerful as the masses scattered at the foot of mount Olivet, that have been hurled from their foundation by Jehovah, monuments at once of his anger against sin, and that the words of Scripture are the words of the living God? In taking a last look of the city, we may pray, that as we now behold from hence the Jerusalem desolate, we may one day behold “the holy city new Jerusalem,” the gates of which are of one pearl, and the streets of pure gold, where God shall wipe away all tears from all eyes, and there shall be no more death.—*Hardy’s Notices of the Holy Land.*

EARLY HABITS.

Addressed to the Young.

THE power of confirmed habit is almost invincible. It is a “strong man armed.” So the weeping prophet considered it, when lamenting over a people that had grown old in iniquity. He did not mean to declare it an absolute physical impossibility to change a natural habit, as it is for the Ethiopian to change his skin or the leopard his spots; but by a strong expression, in the language of poetry, to assert that it is extremely difficult, and is rarely done.

I therefore solicit attention to your early habits. We have considered knowledge as preparatory to the formation of principles; and principles, as preparatory to the formation of character, or settled habits of conduct.

I. In regard to the importance of early habits, it is obvious to remark,

1. That they are those most easily formed. Childhood and youth, like the pliant clay upon the potter's wheel, are susceptible of being moulded with comparative ease, to various forms. Or, to vary the illustration, if life be compared to a race, youth is the setting forth; before an uncontrollable momentum is acquired, almost any course may be taken. Or, if human life be compared to the growth of a tree, youth is the twig or the sapling which may be easily bent in any direction.

2. Not only are early habits the most easily formed, but the hardest to alter. You can with much more ease change or abandon a habit formed at fifty, than one formed in youth. There is always through life a strong proneness to return to the habits first formed. They are the deepest, firmest, most natural, most unwilling to forsake you.

"Just as the twig is bent, the tree's inclined."

"Train up a child in the way he should go, and when he is old he will not depart from it." And, for the same reason, train up a child in the way he should *not* go, and when he is old he will not depart from it. Hence it is said of the man who has grown old in iniquity, "His bones are full of the sin of his youth, which shall lie down with him in the dust." It frequently happens that men who had formed vicious habits in youth, but had brought them into subjection during the strength of prosperous manhood, fall a prey to them again as trouble or age advance, and sink under them into an ignominious grave.

3. The habits early formed, will go far towards determining the character of your society. The kind of society into which a young man is early introduced will depend very much upon the habits which he early forms; and in the kind of company with which he sets out, he is most likely to continue. It is very difficult and rare for a man to change his company. He scarcely ever does it, unless from some powerful religious impulse. One of the mightiest holds that Satan has upon the young is through the influence of their companions. Hence the author of the inspired Proverbs urges it, as a powerful inducement to early habits, "That thou mayest walk in the way of good

men, and keep the paths of the righteous." "He that walketh with wise men shall be wise, but the companion of fools shall be destroyed."

4. By the habits which you now form, you will secure or forfeit the confidence and support of the community. By far the greater proportion of young men are destitute of large pecuniary means. They have no other capital than their character. This, if it is good, is the best, but if bad, it is the worst capital in the world. Most of those who have acquired wealth, and risen to distinction in other respects, have done it without pecuniary capital to start with. They have accomplished it chiefly through the direct and indirect influence of the habits which they early formed; and in no respect were their habits more important to them, than in the confidence and support of the community which they secured.

Your success or final failure in business, must therefore depend very much upon your early-formed habits. In rising into successful business without capital, or from a small beginning, many trials must be encountered, and many difficulties surmounted. If you do not readily succeed, you are in danger of becoming discouraged, and of falling into the gulf of dissipation. But form right habits, persevere in them, so as to secure the sympathy and confidence of good men; and all the trials, difficulties, and disasters which befall your early efforts, will at length give way, and a plain path will open before you. Every young person owes to himself the duty which Paul enjoined on Timothy: "Let no man despise thy youth." He ought so to conduct himself as to secure the confidence and esteem of all who know him.

5. It is exceedingly probable that the habits which you form in youth, will determine the future and everlasting condition of your soul. They certainly will, if you die young; and they most probably will, if you live to old age. When we consider how large a proportion of our race are cut down in youth, and of those who live to old age in sin, how few then abandon their sinful habits and are prepared for heaven, is it too much to say, that the moral habits which you form in youth, will in all probability fix your character and condition for eternity?

II. Let us then proceed to specify

some of the most important habits to be early formed.

1. A habit of proper subordination and respect towards all superiors in age or rank, is of the first importance. It is equally a law of nature, of civilized society and of religion, which enjoins the duty; and the young man who transgresses this law, must lay his account with a heavy rebuke both from God and man.

Insubordination to parental authority, and a want of grateful filial affection, is a sin of deep die; and none is sooner or more certainly overtaken with judgment. "The eye that mocketh at his father, and despiseth to obey his mother, the ravens of the valley shall pick it out, and the young eagles shall eat it." "He that curseth his father, or his mother, shall surely be put to death." "Honour thy father and thy mother: that thy days may be long upon the land which the Lord thy God giveth thee," Prov. xxx. 17; Exod. xxi. 17; xx. 12. There are scores of scriptures of similar import; and does not all experience illustrate their truth? Is it not a fact that insubordination, or misconduct in any form towards parents, is followed with a curse, even to the cutting short of life; and that filial piety is followed with a correspondent blessing?

The same general principle holds respecting your conduct towards superiors. Public sentiment, if nothing else, will soon punish that youth who fails to form a habit of due respect towards parents, guardians, teachers, or any of his superiors in age, rank, authority, or intellectual and moral worth. On the other hand, to form this habit, and faithfully practise this duty, is one of the most effectual means of securing the confidence and esteem of mankind.

2. A habit of strict temperance in all things, cannot be too early or too thoroughly formed. Read the inspired history of Daniel, who rose from the condition of a poor captive youth, to an importance which caused the great monarch of Babylon to do him homage, and which finally made him the saviour of his nation. Stedfastly refusing the luxuries of the king's table, and persisting in his simple diet of pulse and water, he grew in beauty of body, vigour of intellect, and purity of spirit, till he far surpassed, even in the king's judgment, all those who feasted at the royal

board. Franklin, when young, by avoiding all stimulating meats and drinks, and adhering to a strictly temperate style of living, and even fasting one day every week, soon surpassed his companions, who were devoted to indulgence, and lived in the full vigour of his powers long after they were in their graves. It is always a darkly ominous sign for a young man to be fond of what is called "high living."

Vast numbers of our young men, and young women too, are becoming the subjects of debility and disease; some are going rapidly towards the grave, and others gradually sinking into depression of spirits; some are almost destitute of mental energy, or strength of purpose; others are in that condition of intellectual and moral torpor, which renders them insensible to the high appeals of moral and religious truth; thousands are destitute of that positive brightness and nerve of intellect, that buoyancy of spirit, and elevation of hope, which are requisite to success in any great undertaking; and many more are the worthless victims of excited appetite, lust, and passion;—all from habits of intemperate living.

They do not, perhaps, become intoxicated with strong drinks; nor do they, at any time, absolutely surfeit themselves. But they habitually—and it is the habitual practice that ruins—they habitually enslave the mind to the body, and the body to appetite; they constantly overcharge the digestive functions, and thus insensibly bring on that morbid condition of body and mind, whence all these evils result.

"He that striveth for the mastery," said Paul, "is temperate in all things." Think of the value of uniformly cheerful and elastic spirits; of a vigorous and clear mind; of freedom from painful or uneasy sensations; of being enabled to go forth with energy and delight to every duty; and of retaining unbroken health to a good old age: temperance is the natural parent of all these blessings.

A professional gentleman advanced in life, once informed me that he had always enjoyed perfect health, and that he scarcely knew the meaning of pain, or of dejected spirits. I asked him how it came to pass. He replied, "I early formed a habit of taking nothing into my system which I had found injurious; and of always leaving off eating while I had yet a good appetite."

The rule of temperance is—A moderate use of whatever nourishes, and total abstinence from whatever injures. The best food is the most simple; the best drink in the world is pure cold water. Every appetite for hurtful things is artificial and vicious; it is provoked and increased by trouble. I have often observed that persons strongly attached to coffee and tea, whenever they are in trouble, increase the quantity and strength of their beverage. We have all observed the same fact respecting those who drink intoxicating liquors. Now, a healthy and natural appetite operates in a manner directly the reverse of this; it is diminished by trouble. This is according to the constitution and necessities of our nature. When the human system is excited or oppressed with anxiety, or mental suffering, it requires rest from all stimulants. This is what a healthy appetite always dictates; while a morbid appetite, or a craving for hurtful things, at the very time when denial is most important to health and life, is most clamorous for indulgence.

Beware, then, of every appetite which increases its demands when you are under these unhealthy excitements. If you have already begun to form such an appetite, allow me to advise you, before you close this chapter, to determine never again to indulge it. Decide this moment. Try your strength now; see what you can do. I know a gentleman of high standing, who was some years since in the habit of taking brandy with his water at dinner. He at length became so attached to it, that he could not relish his dinner without it. Perceiving this, he one day said to himself, "I will not be the slave of a brandy bottle!" From that moment the habit forsook him; he has not used the bottle since, and now he has a keener relish for his dinner without brandy, than he ever had with it. The same is true, more or less, in regard to the use of all stimulants and narcotics. Give them all up, and you will soon find your reward in a keener, sweeter, more natural relish for both food and drink, and in more uniformly cheerful and bounding spirits.—*Hubbard Winslow.*

(To be continued.)

BOULOGNE.

BOULOGNE is one of the most ancient towns in France, and its origin may be

traced to the Roman invasion. At that period this part of the country was called Morinia, and formed one of the great divisions of Belgic-Gaul. Marshes and forests covered its soil: the inhabitants were distinguished for courage, and when Julius Cesar had subdued Helvetia and Belgium, they for some time resisted his progress. At length, however, they submitted; and the Roman general, wishing to retain the conquests he had gained, and to facilitate his communications with England, built a town, which was then partly surrounded by the sea. Fifty years before the Christian era, a relative and lieutenant of Cesar gave it a name from *Bolonia*, his birth-place in Italy. It afterwards became an important sea-port, and the chief bulwark of Gaul; it was long regarded by the Roman emperors as a military station, and chosen as the arsenal for their fleet.

As their power declined, the territory in which it stands was plundered by various hordes of northern barbarians; and in the year 420, it was invaded by a numerous army of Franks, who settled in Morinia. Attila afterwards appeared in Gaul, at the head of a vast force; but the brave resistance of the inhabitants of Boulogne compelled him to retreat. In the early reigns of the French kings, it was devastated by the Danes, the Huns, the Vandals, and the Normans; who destroyed every monument of Roman greatness and power, set fire to all its public edifices, and spread desolation throughout the province. The war between France and England, which commenced soon after the thirteenth century, renewed their long-continued calamities. As the English took possession of Calais, Boulogne was the only bulwark opposed to them for two hundred years on the side of Picardy. But after a long resistance it was taken by Henry I., in 1544, and after a treaty was delivered up to Henry II., in 1550. Still its tale of hostility, with its attendant miseries, was not ended; it was lengthened by the wars of the league and those with Spain, and it was not until the seventeenth century, that better times came.

Its rise from extreme depression was owing to Napoleon Bonaparte. Having chosen Boulogne as the central rendezvous of "the grand army," a new impulse was given to its population. It was there he assembled his forces for the

invasion of England. His army was composed of 172,231 infantry, and 9,302 cavalry; his flotilla, consisting of 2,413 vessels, was manned by 16,790 effective men, and they were well provided with stores and ammunition. Along the shore, forts or martello towers were erected, and the coast was mounted with mortars and cannon of the largest calibre. So formidable, indeed, was the appearance presented, that it is said to have been surnamed by the English, the iron coast.

In the beginning of July, 1803, the troops encamped in the neighbourhood of Boulogne. One camp presented several lines of more than three miles in length. Each division of the army was separated by intervals in the form of streets, bearing the name of some renowned commander, who had fallen on the field of battle. All that was practicable was done to promote the efficiency of this immense martial band; and when the soldiers were not otherwise engaged, they were occupied in adorning their habitations; laying out beautiful little gardens, intersected with columns, obelisks, and allegorical figures made of clay and shells, and displaying in these works not only much industry but taste.

The barraque of Napoleon, one hundred and twenty feet long, and twenty-two broad, commanded a view of the camp, the town, and the sea. About him were quartered several of his ministers, who followed him from Paris, the commander-in-chief, the admiral of the flotilla, and the officers of his staff. The bedstead on which he slept, was one of polished iron, on which he died when an exile at St. Helena. What a transition was that from the height of power he had gained, illuminated by the beams of still anticipated glories, to the solitude and dreariness of that huge rock! There is, however, a more affecting contrast still: it is that of leaving earthly good, only to be consigned to "outer darkness." Reader, are you in danger of such a doom? The only "hope" of salvation that is "good," is one "through grace;" it is a "looking for the mercy of God, through Jesus Christ our Lord."

But while this country was thus threatened with the entrance of a foreign and insatiable power, means were adopted to avert so great a calamity. The navy was put into active service, the militia

was embodied, and an army of reserve formed and rapidly trained. The volunteer corps were chiefly headed by the gentlemen and nobles of highest consideration in their respective neighbourhoods. Among the crowd of public persons, Mr. Pitt, the leader of the British government, was colonel of the Cinque Ports volunteers; and his late majesty, then Duke of Clarence, commanded a corps near his seat at Bushey, to whom he made a Spartan speech: "My friends, wherever our duty calls, I will go with you, fight with you, and never come back without you." A bill was also passed, enabling the king to call out all his subjects who were able to bear arms; martello towers and signal posts were raised along the coast; and a tax was laid on property, to meet the various and extraordinary expenses of this national emergency.

Impatiently did Napoleon wait for the day of embarkation, while the army was warmly excited by the hope of meeting the English on their own soil, when the defeat of the combined Spanish and French fleets off Ferrol, on the 22nd of July, 1805, by Sir Robert Calder, suddenly frustrated and changed the plans of the emperor. Assembling his troops on the grounds between Alpreck and Cape Grinez, he reviewed them, and then gave orders for their immediate march towards the Rhine. Prior to his final departure, he ordered sixteen forts to be erected on the neighbouring heights of Boulogne, in order to protect the flotilla and the town. Towards the end of August, the encampment was quitted by the troops, and immediately afterwards it was occupied by seamen, recruits, and national guards.

A different order of feeling has since arisen between the two countries. It was eloquently remarked by lord Glenelg, on the twenty-third anniversary of the Bible Society, as he alluded to the preceding address of the representative of the Paris society, the Baron Pelet de la Lozère: "Happy should I be, if I could in any adequate manner convey to that noble—I was going to say stranger, but I recall the word—that noble friend, that noble and Christian associate, who has come to this meeting, to unite his spirit with ours, and to proclaim himself, in the eyes of the British nation, our copartner in the glorious cause in which we are engaged. Well

do I remember the day, when the first whisper was heard of a Bible Society in France: well do I remember the delightful feelings excited throughout the country: well do I remember its first announcement in this room; and happy am I that I have lived to see the period when every anticipation has been more than accomplished.

"We have heard from that illustrious Frenchman, sentiments which do honour, not to human nature alone, but to our society as well. He has told us that the seed we have sown in France has not been fruitless; and well has he proved the truth of this assertion in what he said. It naturally recalled to my mind these lines:

'Coasts frown on coasts, by adverse waves
disjoin'd;
Arms—gods opposed—but most the adverse
mind.'

"These lines shall now be banished from our recollection. We shall forget national enmity, a thing hateful to humanity, and execrable in the ears of Christianity. We now deny that 'coasts frown on coasts, by adverse waves disjoin'd.' We say, coasts smile on coasts. We say, that they were opposed, but are so, thank God! no longer. There are no longer the adverse minds, but friendly and fraternal minds; and, above all, God is no longer opposed. We are ranged round the same memorial of our common salvation; we acknowledge one Redeemer; we bow to one God; and confess ourselves one flock under one Shepherd. And well has that illustrious person observed, that this eradication, as I hope it may be called, of national hostility, may be ascribed to a higher cause than mere human philosophy. Much may be done by philosophy; much may be done by learning and science: but let me say, and only repeat what he has so well said, that this science is not taught in the sun-burnt arena of other science, but in that volume which we are met to circulate: taught in the recollection of those scenes, to which we look back with wonder and affectionate sympathy—the scenes of Gethsemane and Calvary; and taught, best of all, at the foot of that cross, which was elevated as the banner of all nations; and which at this moment, though we see it not, is as truly elevated as if we did see it with our eyes; and is collecting in its ample shade all

the ransomed nations of the world, who will henceforth follow one Leader, the Captain of their salvation, made perfect, indeed, through suffering, but crowned at last with triumph and glory."

DELAY NOT TO DO GOOD.

THAT "delay is dangerous," has resolved itself into an axiom of almost daily repetition in some shape or other. Sometimes it is in verse, as,

"Be wise to-day, 'tis madness to defer."
"Procrastination is the thief of time."
"But soft, Horatio, seize the present moment."

It occurs also in the daily prose of life, as in constant lectures from the witnesses around us of our forgetfulness, who, probably, feeling themselves exempt from censure on this point, are the more profuse in their rebukes of our derelictions. Sometimes, moreover, it is presented to us in allegory, as in a paper in the *Spectator*, where the elegant writer, speaking of habits when first contracted, says, "They are but as slender threads fastened around the body, but for want of being snapped asunder, when first discerned, they become dense and immovable chains, irrevocably confining their unfortunate victims in eternal imprisonment." But, perhaps, the most acute form of rebuke given us for "putting off till to-morrow what ought to be done to-day," is that of conscience. Especially when a known duty has been shunned, this inward reproof produces nothing less than severe remorse; and happy is the man, who, instead of silencing this inward monitor, will hear its story out, and resolve henceforth "to work while it is called to-day."

And yet how often we hear, as well as utter, the flimsy excuse, on the omission of a positive duty, "Oh, I forgot it; I will certainly do it to-morrow;" as if forgetfulness could form any apology, or there were no likelihood of being too late on the morrow; supposing it even to be ours, of which no one can ever be sure. To any reflecting mind there must appear a great degree of folly in thus loading a date, at best uncertain, with the work and burden of the present hour. And if we examine for what it is that one duty has been thus neglected, it may often be detected to have been a

mere trifle in comparison with the actual call before us. Thus we say, "We were engaged, we were tired, we were otherwise occupied; it would do as well another time; we were not in the mood for exertion;" as if any or all of these excuses could be valid in the eyes of Him who said, "Son, go work to-day in my vineyard."

And surely there are very few of those who know "the plague of their own hearts," who will not plead guilty to having put off to "a more convenient season," the business the Lord had given them to do at that moment. We all acknowledge that it is distressing when our own concerns are injured by our remissness; it is very painful, too, when those dear to us are incommoded by our procrastination; but how agonizing is the thought, that by simply "putting off," we have been deprived of the high privilege of ministering to the soul necessities of those who are perishing around us for lack of knowledge!

Something like these were of late my own sensations, occasioned by circumstances in which I was involved; and it is from the desire of urging on all who may read these lines, to guard against delay, that I will, in few words, describe the cause of such sorrowful feelings. I trust the Lord will engrave the lesson deeply on my own heart, and cause others to profit by the sad detail.

Elizabeth W. was first mentioned to me in June, 1837, as a poor widow in deplorable distress, and suffering from ill health. Her wants were relieved, her bodily afflictions were entirely removed; and I obtained a situation for her, to which I considered her adapted. She was placed in it shortly before I left town; but I had not been away six weeks, before I heard that she pilfered, and that, in addition to being a thief, she was a practised liar! She was, consequently, dismissed in disgrace, and then became one of the numerous beggars that infest the metropolis. The lady with whom she had lived, gave her food from time to time, although she would always persist in denying her thefts, notwithstanding they were clearly proved. So unaccountable did all this seem to me, that, before I returned to London, I fully made up my mind that poor Elizabeth was deranged, and was only convinced of my error by the united testimony of the mistress and servants of the

house; for, alas! they proved to me she was but too sane. She wandered about for some time, living partly on the produce of her clothes, partly by singing and begging, and partly by what her kind mistress still continued to give her. At last she got into the workhouse, where she was taken ill, and sent to ask me to visit her. It so happened that she was two miles distant from the house where I was staying; and not being very well at the time, I sent word that I would come some other day. When I grew stronger, my conscience often pressed me to go and see Elizabeth W., and as often I put it off with some excuse or other.

At last I went; it is now three weeks since, and after some little difficulty about admission, it not being a visiting day, I entered the sick ward, and inquired of the nurse for Elizabeth W. Imagine my feelings on hearing her say, "Oh, she has been dead these three weeks! Poor thing! she suffered a deal in this life." And this was all the information I could obtain; for I could not learn whether she had expressed any contrition for her misconduct, as I only heard an account of her past sufferings when I inquired as to the state of her mind!

Here then was food for bitter reflection! Here was the consequence of my waiting for "a more convenient season." Here was the fruit of my sinful delay! An exceedingly depraved fellow-creature had entered eternity, probably without having any one to direct her to the Lamb of God. It afforded me but little comfort to remember that when my acquaintance had commenced a year ago, I had been faithful to her, and frequently spoken of the Saviour; and that she was not without a Testament, and many excellent tracts. Truly this was poor consolation; for she had asked for me, and I had held out hopes of visiting her, which had proved vain.

Now, reader, I will leave you to judge whether the probity of my intentions before God could, under these circumstances, give me any comfort. No, the only hope I have is, that she may have sought the Saviour in her extremity, and that the Lord will forgive me this grievous omission; and give me grace henceforward to yield an obedient ear to any message He shall send me.

It may be said, "But what good

could *you* have done the poor woman?" I answer, None by myself; but I could have repeated the message of salvation, which is equally free to them that are afar off, as to those who are nigh; and we know that faith cometh by hearing, and hearing by the word of God. And when we think of the worth of the immortal soul, we should do well to lay these things seriously to heart, and seek, by all means in our power, to avail ourselves of the accepted time to point out to our fellow-sinners the way of salvation.

We do not read that "the convenient season ever" came to Felix; and if we let slip one opportunity that our God has graciously given us, in the way of speaking of Jesus, how can we tell that He will ever vouchsafe us another? Oh may the reader and the writer have grace to abound in the work of the Lord! Whether or not we see any fruit of our labour, let us go on sowing to the Spirit, knowing that from "the Lord we shall receive the reward of the inheritance," if we serve the Lord Christ. And the more this truth is acted upon, the more fervent in spirit shall we be in the Lord's business, and the more shall we show that great folly which acts like an opiate for conscience, namely, that of waiting for "a more convenient season."

Q. H. Z.

JOURNAL OF A TRAVELLER IN NORTH AMERICA, BEYOND THE ROCKY MOUNTAINS.

REMARKABLE PINE.

September 18th. The villages of Indians make slow progress in travelling, and being desirous to expedite my journey to some of the posts of the Hudson Bay Company, I took ten Indians and went forward, leaving the remainder to follow at their leisure. We passed over a mountain more than six thousand feet high, which took more than half a day to arrive at the summit. These mountains are covered with woods, excepting some small proportional parts, which are open, and furnish grass for our horses. The woods are composed mainly of fir, spruce, Norway pine, and a new species of pine; the leaves of this new species resemble those of pitch pines growing in bunches at the end of the limbs, being shorter and smaller; the bark and the body of the tree resembling the tamarack, the wood firm and very elastic. On

account of this last and peculiar property, I have called it the elastic pine. It grows very tall and straight, and without limbs, except near the top. They undoubtedly would make excellent masts and spars for shipping. On experiments which I made, I found it very difficult to break limbs an inch in diameter. After passing part of the way down this mountain, we encamped by a small spring.

REFLECTIONS.

Sabbath, 20th. Continued in the same encampment, to rest according to the commandment. I told Charle he had better spend a part of the day with his men in devotional exercises. They all knelt down, and he prayed with them; after which he talked with them a considerable time concerning the things which I had taught them. It was truly interesting to see these poor heathen upon their knees trying to worship God according to the instructions of the Scriptures. How can any Christian refrain from doing what he can to give the lamp of life to these benighted souls, and especially, seeing they are so anxious to know the way of salvation, and so ready to do? After they had closed their worship, I sang a hymn, and prayed, and conversed with them.

The inflammation in my head continuing, I bled myself copiously, which reduced my pulse for a while, but increased my weakness, so that I could walk but a few rods without much fatigue.

Sometimes, amidst all the evidences of God's mercy to me, I found my heart sinking into despondency, and was ready to say, I shall perish in these wild, cold mountains. It seemed, that such was my failure of strength, and I was becoming so emaciated, that I could not endure the fatigue of travelling eight days more over these mountains, which are on an average about six thousand feet high; and as they range north and south, with only very narrow valleys between, and our course was only a little north of west, we were constantly ascending and descending; and we could not discontinue our journey for the want of provisions. The thought, that I must fail of accomplishing the object of my mission, and close my life without a sympathizing friend near with whom I could converse and pray, and be buried

in these solitary mountains, filled me with a gloom which I knew was wrong. My judgment was clear, but I could not make it influence the feelings of my heart. At night, I sometimes thought a pillow desirable upon which to lay my aching, throbbing head; but my portmanteau was a very good substitute, and I rested quietly upon the ground, and every morning arose refreshed by sleep.

NATURAL CURIOSITY.

Monday, 21st. I had noticed the mountain over which we passed to-day, which is about seven thousand feet high, two days before we arrived at the top; and queried in my mind whether Charle, my guide, would not depart in this instance from the common custom of the Indians, which is to pass over the highest parts of mountains, and to descend into the lowest valleys. But we passed the highest part, except one peak, which, in nearly all its parts, is perpendicular, and rises like an immense castle or pyramid. It is composed of basalt; and around it volcanic rocks lie scattered in great profusion. At the base there are also excavations, around and below which there is much lava. This is a granite mountain, much of which is in its natural state. The way by which I calculated the height of these mountains is, that some of them are tipped with perpetual snow; and as eight thousand feet, in latitude 42°, is the region of perpetual snow, so there can be no doubt, as these do not vary greatly from each other, that they average six thousand feet.

I was much interested with a curiosity upon this mountain, which was two granite rocks, each weighing many tons, placed one upon the other, like the parts of an hour glass. It was wonderful how nicely the uppermost one was balanced upon the other. It would seem that a puff of wind would blow it off its centre. Charle, the chief, seeing me one day examining, with a magnifying glass, some minerals, said, "These white men know every thing. They know what rocks are made of, they know how to make iron, and how to make watches, and how to make the needle always point to the north." They had seen a compass before, and when I showed them mine, they said, "That would keep me from getting lost." Encamped upon a mountain by a small spring, where there was

but little grass. A waterfall was seen descending down a high point of the same mountain, which, by its continual foaming, looked like a white belt girding its side.—*Parker.*

THE FREENESS OF DIVINE GRACE.

It is absolutely necessary to a clear and full view of this doctrine, that we ascribe to the free, sovereign, and unmerited grace of God, the first desire after him that ever arose in our hearts, as well as the fulfilling of that desire, when expressed in prayer. We must be convinced that nothing in the work of salvation is our own, but only the gift of God's love to us in Christ Jesus. Christ died for us when we were enemies. The benefits of his death are applied to us, for the purpose of reconciling us, not in consequence of our making any advances towards being reconciled. He "died for the ungodly," for those who were "without strength," without strength to come to him; without strength to form so much as a wish to come to Him. The desire to come is given for his sake, the ability to come is given for his sake, the acceptance on coming is an acceptance for the beloved sake of this beloved Saviour, "without whom we can do nothing." Those who say, "Grace will be given if we ask, but then asking must precede or procure the given grace," are in effect robbing God of much of the glory due unto his name. For the power and the inclination to ask are of themselves a part of the free gift of God's grace to us in Christ Jesus. They are the beginning of God's work in the heart; and to say that we begin this work, is no other than to say that we can create ourselves anew in Christ Jesus. I will venture to affirm, that if God waited to give us his grace till we asked him for it of our own accord, we should go without it to all eternity.

The great source of error on this head, even amongst serious people, is, that they cannot bring themselves to think they have nothing of their own in the work of salvation. Therefore it is, that when constrained to acknowledge that the grace given them when they seek, is from God only, their self-righteousness betakes itself to another strong hold; and we find them laying claim to their asking and seeking, as

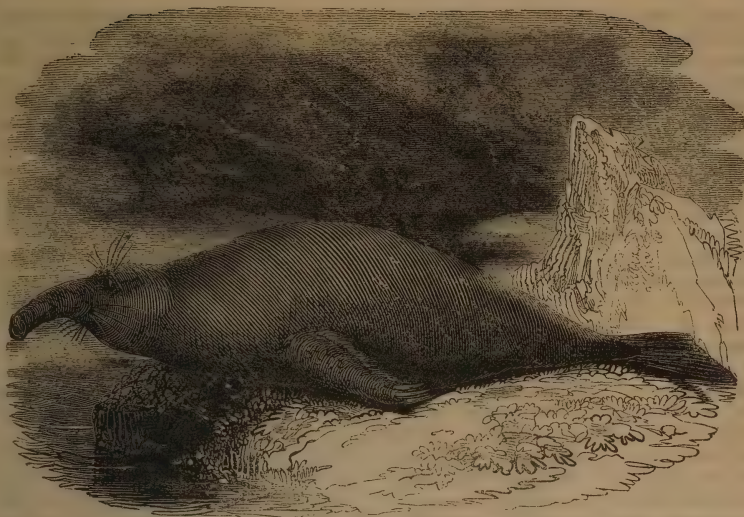
if that at least was the effort of their own will, the spontaneous act of their own power. This is just as if one should take a dead person by the hand, breathe life into him, and lift him up upon his feet; and that person should make a show of acknowledgment to his benefactor, by allowing to that benefactor the praise of lifting him up after he was alive, and keeping him alive ever since, and yet should maintain that the first breath of all came into him by his own spontaneous act, by the effort of his own assisted power. The absurdity of such an assertion with regard to temporal life, would strike us at once; but we are not so struck with it in reference to spiritual life; and the reason is this, when we speak of a corpse, we know what we speak about; there it lies before our eyes, incapable of breathing, moving, speaking. We perfectly know what we mean, when we say that a dead body cannot raise itself to life. But when we speak of a soul "dead in trespasses and sins," we too often use the phrase, merely because we find it in the Scriptures, without the slightest conception of the awful reality expressed by it. Nor is it till we have ourselves in some measure "passed from death unto life," that we begin to perceive the dreadful and close analogy which really exists between the two states of natural and spiritual death. If God were to come to an unconverted person with the question, not "Can these dry bones," but can these dead souls "live?" he would be apt to reply, Why not? what should hinder them from raising themselves up and breathing the breath of spiritual life? But when God has quickened us from our own death in trespasses and sins, our eyes are opened to see what spiritual death really is, and then we learn with trembling awe to reply: "Lord, thou knowest. This is thy work. It is thou that must make us alive, and not we ourselves."

Since then men are universally disposed to "go about establishing their own righteousness," how carefully ought we to close up every avenue, through which this besetting sin might gain admittance, and rob us of our peace, by leading us to rob Christ of his praise! Many are the windings of our own treacherous hearts; many are the devices of Satan, by which he would tempt us to ascribe to our own strength, what God has done for us of his mere mercy. Nor

let us think that a mistake here can be of trifling importance. God is very jealous for his great name; and he has declared, that "if we will not lay it to heart, to give glory to his name, he will send a curse upon us, and will even curse our blessings." Many and glorious are the crowns which adorn the sacred head of Immanuel. Let us not try to pluck thence the brightest and fairest of them all; for well does it become this King of kings. When we reach heaven, and receive the crown of glory, we shall be ready enough to cast that at his feet, and to say, Thou only art worthy. Let us do the same with the crown of grace here, for surely we have as little right to arrogate the one to ourselves as the other.—*M. J. Graham.*

GARDENS.

GARDENING was probably one of the first arts which succeeded to that of building houses, and naturally attended property and individual possession. Culinary, and afterwards medicinal herbs, were sought by the heads of families, and it was found convenient to have them within reach, without seeking them at random in woods, in meadows, or on mountains, as often as they were wanted. When the earth ceased to furnish spontaneously all these primitive luxuries, and culture became requisite, separate enclosures were made for rearing herbs. So it must have been also with fruits, and those most in use, or that demanded attention, must have entered into, and extended the domestic enclosure. Thus kitchen gardens and orchards were gradually acquired. The *kitchen* garden which slid naturally and insensibly into what has for so many ages been peculiarly termed a garden, and been distinguished by our ancestors in this country by the name of a *pleasure* garden. A square piece of ground was originally parted off, in early times, for the use of the family; and to exclude cattle and ascertain property, it was separated from the fields by a hedge. As the desire of privacy or display increased, the enclosure was dignified by walls; and in a climate where fruits are not cast forth abundantly from the sap of nature, fruit trees were assisted, and sheltered from surrounding winds by the same means; and thus preparation was made not merely for comforts, but for luxuries.—*H.*



THE SEA ELEPHANT, OR PROBOSCIS SEAL.

Macrorhinus Proboscideus.—Cuvier.*Phoca Proboscidea*.—Desm.

THE Seals constitute an assemblage of animals, singular alike for their forms and their habits by which they are distinguished, and as it might appear almost dissociated from the groups with which in reality they are intimately connected. Admirably constructed for aquatic progression, they tenant the boisterous ocean, and there pursue their prey. They are not, however, exclusively aquatic, as are the *cetacea*, but they come ashore to rest, and on shore they bring forth and rear their young. In the *cetacea* the figure is extremely fish-like, the skin is naked, the hinder limbs are wanting, the tail is converted into a powerful horizontal paddle, and the fore limbs into flippers or balancers. Not so in the seals; yet is there an approximation to that type of structure which in the *cetacea* is carried out to its maximum. The body is elongated, and conical; the spine very flexible, and provided with muscles acting forcibly upon it; the skin is covered with very close short hair; the pelvis is narrow; the hinder limbs are thrown as far backwards as possible, extending beyond a short stout tail, and the feet are formed into paddles, the toes, of which the first and last exceed the rest, being united by intervening webs; the fore-paws are short and paddle-like,

but have far less resemblance to fins than have the flippers of the whale, for the toes though compacted together, are not only true and distinguishable, but are armed with sharp nails, and hence they clamber up rocks, or shuffle along upon the shore, with awkwardness, it is true, but with more celerity than might reasonably be expected.

The *cetacea*, in the system of arrangement adopted by most naturalists, constitute an independent order; the seals, however, form part of the *carnivora* or *fera*, from the terrestrial groups of which, (as the *musteline* races, for example,) to these marine animals, the transition is not so abrupt as might be at first conjectured. The others most clearly form a passage-link between them, one of which, the sea otter, *lutra marina*, Erxl. (*enhydra*, Flem.) is so intermediate in form, and so marine in its habits, that it might be regarded as a seal among otters, or an otter among seals. Were, however, the links between the terrestrial *carnivora* and the seals far more obscure, or indeed not to be ascertained, the naturalist could not mistake their mutual relationship. Dentition, and organic structure, would easily guide him in his views, and enable him to have in a variety of points, the undoubted affinities which bring the seals within the pale of the order *carnivora*.

The dog excepted, few, perhaps no animals possess a greater share of intel-

ligence than the seals. The common seal (*phoca vitulina*) has often been tamed, and exhibits both docility and attachment; the cavity of the skull is capacious; the eyes are large, dark, and expressive; and the voice is capable of considerable inflection. The attachment of the parents to each other and to their offspring is very great, and they are decidedly gregarious in their habits. Their food consists of fish, which they pursue in the water, committing great ravages, especially where they multiply unchecked by the destroying hand of man; for among the objects of his search, as conducive to his interests, the seal is not to be omitted; it affords oil, and its skin is highly valuable. The Greenlanders and other people tenantry the inhospitable regions within the polar circle, depend upon the seal as the staple of their living; it is to them, what the ox and the sheep are to us, and its arduous chase is a serious occupation. The management of the light boat termed *kajak*, with its various accoutrements, in which the seal is followed over the rough waves of a tempestuous sea, forms an essential part of the education of a people, whose habits, manners, and even ideas are all completely influenced by the contingencies of their situation. Though not immediately necessary to the wants of other nations, the skin and blubber which these animals, and especially some of the larger species produce, are an important object of commerce, and occasion a warfare of destruction to be carried on against the whole race. For this purpose both the northern and southern seas are visited, but especially the southern, where species of enormous size are to be met with, and that in great abundance, so as to repay the outlay.

The seals are universally distributed; they are found in all seas, and congregate wherever lonely islands, or wild and desolate shores afford them an asylum. Specifically numerous, they are divided into several genera, of which one, termed by F. Cuvier, *macrorhynchus*, is represented by the gigantic animal, usually known under the title of sea-elephant, from the peculiar appearance of its elongated snout, conjoined with its colossal bulk. The genus *macrorhinus* is distinguished, not so much by the minor peculiarities of the teeth, as by the presence in the male of a sort of proboscis, a continuation, in fact, of the nostrils, which when the animal is at rest is pen-

dent, but which when the animal is irritated, or takes a violent inspiration, it becomes raised and protruded. The species of this genus, best known to naturalists, is that to which we have alluded. It is the *macrorhinus proboscideus* of F. Cuvier; *phoca elephantina* of Molina; and *phoca leonina* of Linneus.

The native regions of this seal, one of the most gigantic and extraordinary of the race, have an extent almost commensurate with the circle of the globe between thirty-five and fifty-five degrees south. It abounds on the shores of Juan Fernandez, and the coast of Patagonia. It frequents the Malouin islands, Tristan d'Acunha, various islands in the eastern ocean, King island, New Zealand, etc. The proboscis seal, or sea elephant, say Peron and Leo Sueur, is exclusively a native of the antarctic regions, and delights more especially in such isles as are utterly desolate, to some of which it seems to show an exclusive preference. Thus among the numerous islands of Bass's straits, these seals only dwell in great numbers on Hunter's, King's, and New Year's islands; on the isle of the Two Sisters scarcely an individual is to be found, and to the island of Maria they seem to be total strangers. Lastly, this amphibious creature does not exist on the continent of New Holland, nor on the shores of Van Diemen's Land; and the species is only known to the inhabitants of those countries by an individual being occasionally carried thither by a storm or current.

Numerous herds of these seals inhabit the land of Kerguelen, the island of Georgia, and the land of the States, where the English habitually maintain their fishery of these animals. They exist in great numbers on the island of Juan Fernandez. It is probable that the small fresh-water lakes, in which these animals delight to bathe, may induce their preference for particular spots. Besides choosing some islands by preference, these seals also change their residence at particular seasons; they are, in fact, migratory animals. Equally obnoxious to extreme heat and to severe cold, they advance with the winter season from the south to the north, (that is, nearer to the line,) and as the summer comes on, return in the contrary direction. It is in the middle of June that they perform their first migration, covering in countless multitudes the shores of

King island, which, as the English sailors report, are sometimes blackened by them. In other species, also, the same migratory movements have been noticed, and this may be more generally the case than has been hitherto suspected. One great object for which the shores are visited at this season, is the production of the young; two or three weeks after the arrival of the herd, the females bring forth; the young one soon after birth, measures about four feet, and it is assiduously nursed by its parent, who remains on shore during the whole of the period until her offspring is fit to be carried out to sea, and commence its predatory career. It is said, and the account is confirmed by many voyagers, that the males form a line between the females and the sea, while the latter are nursing their young, in order to prevent the possibility of their deserting even for a short space of time their offspring. The period during which the young proboscis seal requires the uninterrupted care of the mother, is about seven or eight weeks, and during the whole of this time, she neither eats, nor is permitted to approach the water, but is kept close prisoner to a very circumscribed spot, deprived of the means of procuring nutriment.

"This strange abstinence," says Peron, "did not escape the observation of the unfortunate Alexander Selkirk, who informed captain Rogers that towards the end of the month of June these animals visited his solitary abode, bringing forth their young about a musket-shot from the sea, and staying to the end of September, without shifting their place or taking any kind of nourishment during all that time. Forster relates the same circumstance; and adds that towards the latter end of their fast, when they have become extremely emaciated, they swallow a considerable quantity of stones to keep their stomachs distended. The growth of the young is extremely rapid; at the end of eight days, it weighs one hundred pounds. So considerable an increase can only take place at the expense of the parent, for she does not repair, by any kind of food, the loss of the nutritious substance which she has supplied. Hence she visibly grows lean; some have even been observed to perish during this painful lactation; but it is of course uncertain whether an internal malady might not have been the cause."

At the age of seven or eight weeks,

(that is, when the mother is almost exhausted, and the young are of considerable size,) the young are conducted to the sea, to which, indeed, the whole herd, both males and females, now retire, and in which, as in a magazine of food, the females soon recover their strength and fatness; here the young are familiarized with the water, but still remain under a sort of guardianship; for they are not permitted to separate from the main body, and such as straggle to an undue distance, are pursued and driven back by one of the old ones.

After sojourning out at sea for about a month, during which time the energies of the system have been recruited, the adult males and females repair a second time to the shore, which now becomes a scene of the most furious conflicts; the females remaining passive spectators of the contest. Though numbers are engaged at the same time in strife, the combat is always individual against individual:—"Two colossal rivals drag themselves heavily along; they meet muzzle to muzzle; they raise the whole of the fore part of their body on their flippers; they open wide their enormous mouth; their eyes are inflamed with fury: thus prepared, they drive themselves furiously against each other, and falling together with the shock, teeth to teeth and jaw to jaw, they reciprocally inflict severe lacerations; sometimes the eyes are torn out of the sockets in this conflict; still more frequently they lose their tusks; blood flows abundantly; but the obstinate combatants, without appearing to feel their wounds, continue to fight until their powers are completely exhausted. It is rare to see one left dead on the field of battle, for their wounds are observed to heal with inconceivable promptitude."

When these scenes of bloodshed and rage have ended, and tranquillity is restored, the troop, headed by a leader, leave the islands hitherto occupied, (in latitude thirty-three degrees,) and migrate southwards, towards the antarctic circle, where they spend (in latitude fifty-five degrees) the summer months, remaining, till the setting in of the frost compels them to return to warmer latitudes. It is observed that a few individuals remain in these latitudes even during the summer, probably in consequence of being disabled by wounds or debility, from undertaking the ordinary journey. In the month of June, the

herds have arrived at their accustomed breeding places.

The young grow very rapidly, and in three years attain to the length but not the bulk of their parents, and at this period the males have the proboscis developed. The ordinary length of the full-grown proboscis seal varies from eighteen to twenty-five feet; the males exceed the females. The young having attained to their full length, increase in bulk, and assume entire independence. Few, even of the seal tribe are more slow and awkward on the shore than the present species. Of stupendous size, and loaded with blubber, they drag themselves along with difficulty, as if oppressed by their own weight; but in the water they float with great buoyancy. Their food consists of fishes, cuttle fish, and other molluscous animals, together with some kinds of sea-weed; on opening the stomach, the fishermen affirm that they find them containing vast numbers of the hard parrot-like beaks of the cuttle fish, mixed with marine plants, and often also with stones or gravel.

The females are destitute of a proboscis, and have the upper lip slightly fissured at the margin. The hair is very short and close set, and of a grey or bluish-grey colour, and sometimes brown. The lips are furnished with long stiff whiskers, twisted like a screw, and a tuft of similar bristles rises above the eyes, which are large and prominent. The anterior flippers are remarkable for their size and vigour; the tail is very short, flattened horizontally and dilated at the extremity. The voice of the female is said to resemble the lowing of an ox, but the males utter a deep, hoarse, gurgling sound.

Captain Carmichael, in his description of the island of Tristan d'Acunha, 1817, observes that the full-grown male of twenty to twenty-five feet in length, yields seventy gallons of oil. See Linn. Trans. vol. xii. "These seals," he adds, "pass the greater part of their time on shore; they may be seen in hundreds, lying asleep along the sandy beech, or concealed among the long spartina grass which borders the sea-shore. These huge animals are so little apprehensive of danger, that they must be kicked or pelted with stones before they make any effort to move out of one's way. When roused from their slumber, they raise the fore part of their body, open wide their mouth, and display a

formidable set of tusks, but never attempt to bite. Should this, however, fail to intimidate their disturbers, they set themselves, at length, in motion, and make for the water: but still with such deliberation, that on an expedition we once made to the opposite side of the island, two of our party were tempted to get astride on the back of one of them, and rode him fairly into the water."

In conclusion, it may be observed, that a good history of the seal tribe is yet a desideratum; much specific confusion prevails among them; and of the details of their habits and manners in a state of nature we have much yet to learn. Tenants, for the most part, of lonely islands and desolate shores; some confined to the northern, some to the southern ocean, they seldom come within the range of the personal researches of the naturalist, who has to depend upon the accounts of voyagers or fishermen for this information; and this is gleaned as it were piecemeal, and often mixed with error. Among the rarer animals of this tribe, the proboscis seal, owing to the circumstance of its being sought for in order to obtain the oil with which its body is loaded, is perhaps the best known, as regards its habits, of all the south sea species. M.

EARLY HABITS.

ADDRESSED TO THE YOUNG.

(Continued from page 434.)

3. Form a habit of fixed and engrossing attention to the subject or business on hand. This habit is in part the fruit of intellectual discipline acquired by study, but results more perhaps from direct efforts of application to those subjects or matters of business which come necessarily before you. You must lay it down as an axiom, that without this habit of concentrated attention, no man can become eminent in his calling, whether it be study or business. Unless you early form the habit of transferring your attention from one subject to another, so as to have your thoughts concentrated upon the immediate subject before you, you will through life sustain very serious inconvenience and loss.

It is said of sir Isaac Newton, that when engaged in his mathematical and philosophical investigations, he was so much absorbed that he forgot all other interests, and day and night sometimes passed over him unobserved: so com-

pletely was all the energy of his mind taken up and concentrated. The late professor Fisher of Yale college, one of the most eminent of his profession and age which America has furnished, was a similar example.

But this habit is by no means confined to students. There are many individuals in active business, who possess this habit in a very high degree. I know a man, who has risen from a poor orphan apprentice boy to be the head of his profession in America, who says that next to the habit of strict temperance which he early formed, was the habit of fixing his undivided attention upon the subject or business before him; and that to this, next to his habits of temperance, he ascribes his success. So well formed was this habit, that although an immense business pressed upon his mind, when other objects came before him, they had his whole attention. He stated that on a Saturday afternoon he received a letter from one of his agents abroad, informing him of a failure by which he lost ten thousand dollars; but as soon as the evening came, which was to him holy time, and he gave up his thoughts to religious subjects, this disaster went entirely out of his mind, and no more returned to it till he resumed his business the next Monday morning. So thoroughly formed was this habit of being what Horace calls *totus in illis*, or wholly absorbed in the thing on hand, that he did not even think of his secular loss till the sabbath was over. This may seem almost incredible, and yet it is not to be doubted. Such examples show us what habit can do.

Absence of mind is frequently considered the mark of a great intellect. Inattention to passing events, may be connected with a strong intellect engaged in some great subject, and it may also be associated with a feeble intellect engaged in nothing; but whether the intellect be strong or feeble, it is always the mark of a mind not disciplined to good habits. Adopt the rule, therefore, always to give your undivided attention to the present object; whether it be study, business, relaxation and amusement, company, the conversation of a friend, or religion. In the house of God, and in all seasons due to devotion, give up your thoughts and feelings entirely to religion. Chastise every wandering thought, and school your mind to a fixed and absorbing attention.

You will find this at first very difficult; but persevere in it, and you will soon form a habit which will become as a second nature, and will prove of incalculable value.

4. Form habits of industry, frugality, and benevolence. Diligence in business is a duty enjoined upon you as truly as prayer. The man who would accomplish much in this short life, must early form habits of husbanding well his time, and of turning all its precious moments to best advantage. He should, as far as possible, have regular hours; a time for every thing and every thing in its time, and count every hour as lost, which is not faithfully given to its appropriate object.

A frugal habit is also an essential virtue. A man is rich, not so much according to the amount he has, as according to the little he wants. And every shilling which a young man spends unnecessarily, whether for dress, or amusement, or to gratify his appetite, will prove a greater injury to him for the evil habit which it forms, than for the pecuniary sacrifice which it costs him.

But the latter damage is by no means to be disregarded. The young man who would acquire property, must reduce his expenses to the smallest amount which he decently can, and he must call himself to strict account for every farthing. I heard a gentleman of large property, who began life with nothing, say, that when he was an apprentice boy, he was for some weeks in the habit of stepping into a shop, at eleven o'clock, and of treating himself with a piece of pie. He one day thought within himself that it was a foolish habit, of no advantage to his health; that the cost amounted in a year to about five pounds, and that the money spent in this way, with the interest upon it, would in a few years swell to a sufficient sum to start a man in business and become the germ of a future fortune. He immediately abandoned the habit; and who can tell how far his subsequent success has turned on that important incident?

Most young people of both sexes are going too fast in their expenses. They dress too much, and pay too high a tax for the gratifications of amusement and appetite. There are scores and hundreds of young men, who cannot get started in business, and cannot settle in life, because they have never learnt to

regulate their expenses by their income. If in their expenses they would contrive to fall habitually a little short of their income, instead of going a little beyond it, a few years might establish them in an independent business. The young man who by reducing his expenses can save a little from a small income, is really better off, and will finally be richer than he who is living freely and saving little from a large income; for there are hundreds who can make money, where there is one who can save it. Growing substantially rich, is more a saving than a getting process. It is hardly desirable that your income should be great for the first few years; it is rather to be preferred that it should be such as to compel you to form habits of economy and frugality, and to select for your helpmate one who will be neither too proud nor too indolent, to look well to the ways of her household and eat not the bread of idleness.

But beware that your frugality does not degenerate into a parsimonious and miserly spirit. The best preventive of this is a habit of beneficence. Begin early to interest your heart and engage your hand in the various objects of Christian benevolence. The money expended upon the gratifications of vanity, amusement, and appetite, is usually worse than thrown away. But that which is given to alleviate human sufferings, or to promote the cause of morality and religion, blesses both him that gives and him that takes. "There is that scattereth and yet increaseth; and there is that withholdeth more than is meet, but it tendeth to poverty," Prov. xi. 21.

5. Discipline your tongue to right habits. "It is an unruly member, full of deadly poison;" and it is said that "no man can tame it." If one man cannot forcibly tame another's tongue, yet every man can do much towards taming his own. The habits of your tongue will have much to do in forming your character, and in determining your relation to society. "By thy words shalt thou be justified, and by thy words shalt thou be condemned." How soon will a chaste and discerning mind detect a man's character by his language! Suppose, for instance, that you are on a journey. If any thing low, vulgar, slanderous, irreverent, or profane, anything that discovers want of Christian principle or of good breeding, drops from your lips, all the more cultivated

and pure-minded persons present, will instantly notice it and avoid you. You will thus be exiled from their confidence and society; while the vulgar and the wicked will be attracted towards you. All the elevating influence of the one kind of society you will thus exchange for all the debasing influence of the other. And so it will be with you, in every situation through life. "The words of a wise man's mouth are gracious; but the lips of a fool will swallow up himself," Eccles. x. 12.

6. Form the habit of ordering all your plans and shaping your conduct upon the broad scale of eternity. Live in view of living for ever. Take your relations to God and to eternity into account, in all your calculations. This implies the loftiest and noblest range of thought, the soundest exercise of judgment.

In forming this habit, if the favour of God is more important to you than all other objects, you will always keep it most in view; if a treasure in his kingdom is worth more than any earthly inheritance, you will habitually seek it first. If your soul is of more value than your body, you will not sacrifice its integrity, growth, purity, and glory, to sensual indulgences. You will give to God your best thoughts and warmest devotion; to the interests of his kingdom, your steadfast service; to his word, your most earnest study; to his grace, your cordial acceptance; and to his law, your constant obedience.

You will sacredly appropriate the entire sabbath to its holy duties, whether of devotion, religious reading and study, teaching, public worship, or Christian conversation, with a fidelity that will so warm and baptize your heart in its spirit, as to make its weekly return to you a joyful antepast of heaven. Every morning and evening through the week, will also witness your more private devotions of the family and the closet.

In all your intercourse with your fellow-beings, you will habitually regard and treat them as the subjects of an influence proceeding from your words and actions, to affect their everlasting character and condition. You will form the habit of valuing property, intellect, learning, power, influence, and all other things, chiefly as they may subserve the interests of eternity; regarding this world with all its possessions and pleasures, as swiftly passing away.

You will also study an habitual resignation to losses, disappointments, sickness, afflictions, and whatever evils may befall you by unavoidable causes, assured that all these things are ordered by a wise benevolence, and "work together for good to them that love God."

Proceeding in this way, the longer you live the more habitually will you look upon eternity as your home; upon God as your portion; upon Christ as your Saviour; upon yourself as a pilgrim and sojourner here; and upon heaven as your perfect and happy rest for ever. You will consider all mankind as your brethren, moving onward to the same eternity with you; and you will seek to do them good to the extent of your ability, both in respect to temporal and eternal interests. In a word, influenced by faith in the verities of the gospel, you will endeavour to form all your habits of conduct, looking to the things which are unseen and eternal.

Having surmounted first difficulties, your path will become easier and more pleasant. You will find that "wisdom's ways are ways of pleasantness, and all her paths are peace." For if it is a painful truth, that they who were accustomed to do evil through the period of youth, will not easily learn to do well in old age; it is a happy truth, that they who are accustomed to do well through the period of youth, will not easily learn to do evil in old age. No. Their habits have become their inwrought character, their second nature, and they will go with them to the grave and for ever.

Having in the days of your vigour formed the habit of referring your cares, wants, trials, blessings, and hopes to God; of living to do his will; of confidently reposing all your temporal and eternal interests in his hands; and of thus reducing the sentiment, "My Father, thou art the guide of my youth," to a living habit,—it will be neither in you to fall, nor in God to cast you off. You may be called, like Joseph, David, Samuel, Daniel, Nehemiah, and many others whom the Lord has made perfect through sufferings, to pass through great and severe trials; but the trial of your faith will only serve to elevate your character and make your last end, like Job's, more glorious than the first. Through all the way you will hear the voice of your Almighty and well-known Friend saying to you, "Fear not, for

I have redeemed thee; I have called thee by thy name; thou art mine. When thou passest through the waters, I will be with thee; and through the rivers, they shall not overflow thee: when thou walkest through the fire, thou shalt not be burned; neither shall the flame kindle upon thee; for I am the Lord thy God," Isa. xliii. 2. And finally death itself, to the wicked so dreadful, will be your eternal gain. Having by a righteous life accomplished the end of your existence upon earth, and having glorified God in turning many to righteousness, you will "shine as the brightness of the firmament, and as the stars for ever and ever."—*Hubbard Winslow.*

THE NUMEROUS FAMILY.

A GENTLEMAN at my uncle's table was mentioning the ludicrous situation into which a friend of his had been brought in consequence of a letter having been delivered to him which was intended for another person of the same name. "The name," said he, "that of Smith, is so common, that it almost ceases to be distinctive. The Smiths, supposing them to descend from one common stock, are certainly the most numerous family in England."

Another gentleman present, said it had been asserted, that at least one person in a hundred throughout the British population bore that name; and that, by way of testing it, the person who had made the assertion, had been to several crowded assemblies and called out, "Mr. Smith's house is on fire," or, "Mr. Smith is wanted at home immediately," and then concealed himself in a situation where he could, unobserved, watch the door and judge what proportion of the assembly his intimations had displaced. The hoax was spoken of with the reprehension which all such wanton experiments justly merit. This turned the conversation upon hoaxes, and every one of the company seemed ready to relate an anecdote on the subject, when my uncle adroitly gave it another turn by expressing his dissent from the opinion of the gentleman who thought the Smiths the most numerous family in England. He thought there was a family much more numerous; they abounded, he said, in every city, town, village, and hamlet; indeed, he questioned whether many households could be found in which not one of this numerous family had a dwell-

ing. All present were eager to know the name of the family to whom my uncle referred. "'Tis but," replied my uncle. "'Tis but! 'Tis but!" re-echoed round the table. "I do not recollect the name. I am almost sure we have none in our neighbourhood." "No!" said my uncle, "then yours is the first neighbourhood I have ever met with in which they are not to be found. I should be half inclined to pay you a visit in order to see whether some solitary individual of the class has not taken up a residence among you." The challenge elicited for my uncle as many hearty invitations as there were guests at the table, to visit their respective abodes, each promising him every local assistance in his investigation. My uncle smiled and thanked them for their courtesy, and the subject was dropped.

In the course of the afternoon, the little Mortimers were brought in, and, in spite of the remonstrances of their mother, were plied with cakes, wine, and other delicacies. "'Tis but a drop, scarcely a spoonful," pleaded one of the gentlemen as he persisted in offering the prohibited glass to a little boy. "I must, however, decline his drinking it," replied Mrs. Mortimer, "our children have not been accustomed to take any thing of the kind; they do not need it, and they are better without it. If you would like an orange, Henry, put down the glass and come to me." The child was relieved of his perplexity, and promptly obeyed the voice of a mother who while she never withheld any proper indulgence, had firmness enough not to comply with what she disapproved. Scarcely was the orange peeled, when the attention of the watchful mother was called to a debate between her little girl and a young lady who was persuading her to accept a piece of macaroon. "'Tis but a very small piece; it cannot possibly injure you." "I will ask mamma," replied the well-instructed child. "Mamma cannot have any objection," rejoined the young lady, "'tis but a morsel, and very nice indeed." The child, however, persisted in her refusal until she had obtained her mother's consent. Before this point was settled, an alarm was raised by the baby, who was seized with a violent fit of coughing, and appeared almost strangling. "The child has got something in its mouth," exclaimed Mrs. Mortimer, and taking it from the arms of the terrified lady who was holding it, she bent it forwards and drew from its mouth a lump of the icing

of a twelfth cake. The cause of alarm being removed, I observed that my cousin's countenance assumed an unwonted expression of gravity not altogether unmixed with displeasure. The lady who had been the cause of the fright, perceived it also, and attempted to justify herself by saying, "it was so very small a piece; she could not have imagined any difficulty in swallowing it, her children would take three times as much without the least inconvenience." "Ah!" said my uncle, "I thought we should not have far to seek for some of the 'Tis but family. It proves that we have at least three in the present company; and, but that the present company is always excepted, I would remark, that this numerous and mischievous family are the cause of ruining the health and tempers of more than half the spoiled children in the world: "'Tis but a small lump of sugar,' but it makes the baby sick, or sets it choking; 'tis but a small portion of indigestible cake or stimulating wine, but it is enough to foster a love for the gratifications of the palate, and to sow the seeds of gluttony and intemperance; enough also to lead a child to question the wisdom and kindness of a judicious parent in not accustoming it to those indulgences upon which others set so high a value."

The ladies admitted the justice of my uncle's remarks, but thought him rather too severe upon trifles, admitting, however, that in nine cases out of ten, great results might be traced to very trifling beginnings, of which every one present had an instance to relate. How deep and lasting the impression produced by these sage remarks and striking examples, appeared at the tea-table when the same ladies brought forward their "'tis but" pleadings for hot muffins, in opposition to the mother's decided preference of simple bread and butter; and for a few minutes' delay when the mother had expressed her desire for the children to be taken to bed, as their regular hour had arrived.

Since that, many a Mr. and Mrs., and Miss and Master 'Tis but have I met with in the course of my pilgrimage; and many a family have I seen impoverished, ruined, or rendered unhappy in consequence of its connexion with some of the race, and their adoption of the "'tis but" principles.

There was my old companion, Arthur. My uncle once sent us to exchange some books at the reading room. Next-door

to the library was a pastrycook's shop displaying its tempting rows of raspberry tarts, custards, and buns. "I have a good mind to go in and take a tart," said Arthur. "I think it a pity to buy tarts," was my reply, "when we can have plenty at home." "But these look so very nice, and 'tis but a penny: come along, my boy, don't be stingy." Arthur drew me into the shop, and we began regaling ourselves. Though I really did not feel hungry, I was easily persuaded to take another and another, with the senseless plea, "'Tis but a penny." Thus I went on and squandered a shilling; I believe the largest sum I ever spent in a pastrycook's shop. There I stopped short, heartily ashamed of myself, the more so, because I had put the shilling in my pocket for the use of a poor afflicted boy, on whom we sometimes called, his mother having been a servant in our family. My father and uncle were kind and liberal in furnishing to us the means of innocent gratification, but they both agreed in thinking that a large weekly allowance to young persons was, generally speaking, injurious. Hence, though I never knew the want of a shilling for any really good purpose, I could never squander a shilling without missing it. Arthur was profusely supplied with pocket money, yet his extravagance often reduced him to the meanness of borrowing. On the occasion to which I have referred, Arthur began with a single raspberry tart, with the plea, "'Tis but a penny;" but sundry penny tarts and cheesecakes failed to satisfy him, and only whetted his taste for as many ices and jellies, of which he had to say, "'Tis but sixpence." He went on till he had exhausted his own stock, and then carelessly asked me to lend him a half-crown. Now, my uncle had expressly forbidden both Frank and myself to lend or borrow money, and I knew he would be very angry if I complied; besides, though I had the sum required about me, it was devoted to another and better purpose, and I resolved it should not be alienated, like the shilling from poor James Warner. Arthur was very indignant at my refusal, and uttered many bitter reproaches on me for spending on myself and withholding from my friend: some of them were merited, some were not; the former I pocketed and endeavoured to improve by them, the latter inflicted neither pain nor injury. Months after this, Arthur drew out of his pocket with his handkerchief

a crumpled bit of paper addressed to Arthur Longley, Esq.:—

	s.	d.
Bill delivered	8	0
Cash received	5	6
Balance due	2	6

Arthur was thoughtless as well as extravagant. It was not improbable that he would altogether forget or neglect this little demand, and as I had been his companion when it was incurred, I felt my honour in some degree implicated; so I said nothing to Arthur, but went to the pastrycook and discharged it. Thus my adventure, into which I was drawn by the "'tis but" plea of one penny, cost me three shillings and sixpence. To Arthur it was still more expensive, for it was, doubtless, one of the long series of trifles that led to a great and ruinous result. I have often since thought how much easier it would be to pass by the tempting window, than having once entered the shop to adhere to the proposed limits of expense.

I have observed that the 'Tis but family are particularly fond of attending auctions. Several instances now occur to my mind in which they have gone to an auction-room, perhaps with the intention of purchasing some one article, or perhaps merely to lounge away an idle morning in observing the purchases of others, but have been led on to expenses they never calculated on, and which they were ill able to meet. The lot they intended to purchase exceeded the price they had set upon it; but then, "'Tis but sixpence," or, "'Tis but a shilling advanced on the bidding; it would be a pity to let it go for such a trifle." The next bidding had the same plea; it was but sixpence or a shilling more; and at last the article was purchased at double its value. Nor was this all: many other articles, not wanted, were going so cheap that it was considered a shame to let them go. "'Tis but five shillings," perhaps, "for an article that cost at least a guinea." "'Tis but a mere trifle, and the thing will be sure to come in use some time or other." Thus they have gone home cumbered with an expensive set of need-nots; and the parties have not been long in verifying the sayings of Poor Richard: "Many are ruined by cheap bargains." "Those who buy superfluities will have to sell necessities."

The Miss 'Tis buts are great frequenters

of mercers' shops, millinery and dress show-rooms, bazaars, and other repositories of jewels and trinkets; and the "'tis buts" echo across the counter between them and the shopkeepers, till you might almost fancy the hissing of a tea-kettle; and from the flippant freedom with which pence, shillings, half-crowns, and sovereigns are appended to the said "'tis buts," it might be imagined that those articles were as plentiful as pebbles on the seashore. Such, however, is by no means invariably the case with those who most lavishly squander them away; and I have known several instances of the female 'Tis buts bringing their fathers or husbands to bankruptcy; and of others who 'tis butted all their money away on outside show and finery, either for their persons or their dwellings, and left themselves absolutely destitute of the means of decency, health, and comfort in more substantial things.

I know a gentleman who is fond of accumulating books, and who has, at a great expense, crammed his library with what I cannot help calling rubbishy 'tis buts. He seldom goes a journey but he returns home with his pockets stuffed with pamphlets, inferior editions of works which he already possesses, and modern trumpery not worth possessing at all. "'Tis but," he assures his friends, "a few shillings that he has expended, a mere trifle, not a quarter the price at which the books were originally published." The simple questions, But did you need them at any price? or, Could you afford the money expended upon them? he seems quite incapable of entering into; nor can he at all perceive the fact that in the course of years the trifles thus frittered amount to a considerable sum, sufficient to have furnished him with many really valuable works which he has often desired to possess. He despises a sober neighbour of his who sometimes produces a handsome volume or set of volumes which he says he has obtained by some twenty or thirty acts of self-denial in little things; and thus he is getting up a really select and valuable library: while the other every now and then has to "weed his library," as he calls it; that is, to remove the accumulation of heterogeneous and almost useless matter that cumbers his shelves, still leaving an extensive rather than a select stock. On these weeding occasions, those books which have been purchased and boasted of as having cost but a few shillings when

they were worth pounds, are generally disposed of for about as many pence. In a word, one of the parties referred to, fritters his pounds into 'tis buts; the other spares his 'tis buts till they amount to pounds, and then purchases with them something really worth having.

The family of the 'Tis buts are great wasters of time, though they often speak highly of its value, and complain bitterly of the rapidity of its flight. "You are late, my dear, this morning; we have waited breakfast for you." "'Tis but five minutes past eight, mamma; nothing to complain of." "I do not wish to complain, but I must consider five minutes as an infringement on punctuality. Is your bed made, and your chamber set to rights as I desired?" "No, mamma, I really have not had time this morning; but I will do it after breakfast, it will not take me many minutes." I have generally observed that an apology for waste of time, or an expression disparaging a small portion of time, is almost invariably the accompaniment of a careless confession of neglect of duty, which the few odd 'tis but minutes so lightly esteemed, would have given full opportunity to discharge. The same young lady above referred to, may often be heard to say, "'Tis but a few minutes to dinner time, or to bed time, it is not worth getting any thing to do, while at the same time her basket groans with unfinished work and un-mended garments; and while she laments her want of time to read certain interesting and instructive volumes which have been recommended to her, and to keep up a correspondence with absent relatives. While, I really believe, the whole might be easily accomplished by the simple adoption of the habit of having always at hand some kind of work or book that might be taken up and laid down at pleasure, and which would serve to catch the "'tis but" minutes as they fly, and not suffer them to bear on their wing the record of total misimprovement.

The 'Tis buts are notorious for the waste of property in general. The tradesman's careless apprentice when he spills the liquid, or scatters the tea, or coffee, or other dry goods, or cuts awry the cloth or the silk that he is employed to weigh or to measure, satisfies himself with "'tis but a few drops, 'tis but a few grains, 'tis but a few threads;" not considering that the waste is a robbery upon either his master or the customer. If the former, his master's profits are di-

minished; for the jar, or canister, or piece of goods does not hold out to as many pounds or as many yards as it ought to do. If the latter, his master's credit is injured; he falls under a suspicion of giving short weight or measure. In either case, there is the actual waste, which, wherever the loss may fall, somebody must account for; for there is no waste without sin, and no sin but what must be accounted for. It is not for me to pretend to any great acquaintance with domestic matters. Where things go on properly, a gentleman has no business to interfere with such things; but I have not unfrequently heard the female head of our establishment lament that one or more of her servants were of the 'Tis but family, and that through their wasteful practices of throwing away, with a contemptuous "'tis but," bits of bread, butter, meat, candles, and other articles of household consumption, she had often been deprived of the means of contributing to a poor neighbour's comfort, and in some instances had been obliged to discharge servants simply on account of their inveterate habits of waste, and disregard of little things.

The 'Tis buts are, generally speaking, great jesters, and may often be heard justifying their attempts to impose on the credulity of others, or their rude unfeeling practical jokes with, "'Tis but a joke;" forgetting that the sacredness of truth is violated in all such cases; and that both "foolish talking and jesting," and especially all practical jokes, have a direct tendency to irritate the feelings, and have, in many lamentable instances, led to serious and even fatal results!

The 'Tis buts are often found apologizing for worldly compliances; either justifying their own deviations from the acknowledged rule of Christian duty, or persuading others to join or follow them. "'Tis but a trifle. Is it not a little one?" 'Tis but a little step from the straight line. 'Tis but doing what others do. 'Tis but taking that view of a case, on which two opinions may exist, which is most favourable to our own interests. 'Tis but leaving a person, with whom we deal, to follow out his own mistake; very different from attempting to deceive him. 'Tis but serving another person as he has served me. 'Tis but a little falling in with the customs of society, in a matter against which we have no express rule, and in which to act differently from those around us, might be regarded as

precise and narrow-minded, and excite a prejudice against us, and prove injurious to our worldly interests. 'Tis but for once, or at most, but occasionally; we should not think of making a practice of doing so."

A moment's consideration will lead us to recollect having heard these excuses from the lips of professing Christians; happy for us if we have never been found uttering or indulging them ourselves, in reference to the obligations of strict truth and uprightness, to the sacred observance of the sabbath, to the separation from worldly society and worldly amusements, which are enjoined on the Christian. And when the hollow apology has been upon the lips, has not conscience brought to recollection those unbending rules of Christian duty which, so far from leaving room for evasion by their silence on particular acts and circumstances, provide for every circumstance that can be imagined by claiming universal dominion over the very thoughts and intents of the heart. "Be ye not conformed to this world: but be ye transformed by the renewing of your mind, that ye may prove what is that good, and acceptable, and perfect will of God," Rom. xii. 2. "Come out, from among them, and be ye separate, and touch not the unclean thing; and I will receive you, and will be a Father unto you, and ye shall be my sons and daughters, saith the Lord Almighty," 2 Cor. vi. 17, 18. "What do ye more than others? Be ye perfect, even as your Father which is in heaven is perfect," Matt. v. 47, 48. "Look not every man on his own things, but every man also on the things of others," Phil. ii. 4. "Thou shalt love the Lord thy God with all thy heart, and thou shalt love thy neighbour as thyself," Luke x. 20. "Whatsoever ye would that men should do to you, do ye even so to them," Matt. vii. 12. "Let this mind be in you, which was also in Christ Jesus," Phil. ii. 5. "If any man have not the Spirit of Christ, he is none of his," Rom. viii. 9. "Let your conversation be as it becometh the gospel of Christ," Phil. i. 27. "Be blameless and harmless, the sons of God, without rebuke, in the midst of a crooked and perverse nation, among whom ye shine as lights in the world," Phil. ii. 16. These are the clear and comprehensive rules of Christian obligation, and let no Christian attempt to justify himself in evading or transgressing them.

Nor should it be overlooked, that in the matter of Christian consistency, as well as in the other matters before referred to, those little things which are extenuated and apologized for, and made light of, almost invariably lead to grosser derelictions from the path of honour and duty. "It certainly is not a cancer," said a young surgeon, when he had examined a tumour which was suspected to be of that description. "True," replied an aged and experienced brother of the profession, "true, and a colewort is not a cabbage, nor a child a man; but give them both time enough, and they will certainly grow to be what they are not at present." This shrewd remark will apply to all the cases on which the "'tis but" excuse is so commonly used; and to none more strikingly, or with more deep and awful interest, than to deviations from Christian propriety. Admit that at present it is but what you suppose it to be: if indulged, it will grow on till it becomes something very different, and far more formidable. Both Achan and David might have said of their first unwarrantable act, "'Tis but a look;" but in both instances, looking led to coveting, and taking, and concealing. In every respect, he alone is safe who remains at a distance from the first beginning of sin, the very appearance of evil; but, to adopt a sentiment which, though not expressed in the words of Holy Scripture, is in full accordance with its scope and spirit, "He that despiseth small things, shall fall by little and little." C.

THE EXILES OF ZILLERDALE.

(Continued from page 415.)

It may be asked, how it is that the Austrians, who tolerate protestantism in other parts of their dominions, did not suffer it in the valley of the Ziller. The simple answer is, that up to this time, there was no protestant community in the whole neighbourhood, and the Romish clergy were afraid lest its appearance should be followed by the defection of most of the population; nor can we affect to doubt that they had good grounds for their fears. Had permission been given to open a church in the valley, many would have joined it who could not make up their minds to forsake houses and lands and friends for the sake of the gospel. Their intense anxiety to prevent protestantism from striking any root in the Tyrol

appears, however, in the most distinct shape. First, from the imperial decree which they obtained, forbidding those who were inclined to the Reformation to purchase land or acquire any immoveable property in the country; and secondly, from the final decree commanding them either to return to romanism or to quit the Austrian dominions.

In the year 1834, they had received an answer from Vienna, dated April 2, informing them, "That the government saw no reason for acceding to their request; but that, if they wished to secede from the Catholic church, they might emigrate to some other province of the empire where a protestant congregation already existed." For such an emigration, however, the majority felt no inclination. They justly concluded that, if they must find a new home, it would be better to seek for one not darkened by tyranny. The necessity which compelled them to look out in quest of a new country taught them to prefer one where law not only exists, but is justly administered; where Christianity is not only professed, but proves its vitality by mercy and a meek instruction of the ignorant; they therefore applied for passports to leave the Austrian dominions, and after a delay of seven months, received an answer, dated March 7, 1835, which denied them even the privilege of a voluntary exile. The people were, however, not to be shaken. They now fully made up their minds to leave a country rendered so unhappy by unjust rulers, and in 1836 signified their resolution in due form to the magistrates, who reported it to Vienna. And now the court, that two years before would not give them passports, commanded them to quit the Austrian dominions within four months. The particulars were communicated in a letter of John Fleidl to some friends in Bavaria, early in 1837: which is found in the Review from whence this extract is taken.

To the honour of William IV., king of England, be it recorded, that he was the first who moved in the matter. Again and again, in February and March, 1837, he called upon the king of Prussia to interfere. They had both been parties to the Act of Confederation; they had both guaranteed its observance; they could not see its provisions trampled under foot, to the oppression and ruin of the protestants of the Tyrol,

without sacrificing every principle of self-respect, humanity, veracity, honour, and religion. The king of England and Hanover found no want of sympathy on the part of his Prussian brother, a worthy descendant of those sovereigns who opened their arms to receive the victims of popery fleeing from France, from Salzburg and Bohemia. He was as determined as king William, but desired to act as gently as possible to the emperor of Austria; and therefore, instead of adopting the form of diplomatic reclamation, which must have been attended with a public exposure of political delinquency and breach of faith, he quietly commissioned his chaplain, Dr. Strauss, who was going to Vienna, to intercede with prince Metternich, that, to such families as preferred emigration into Prussia, permission and time for preparation might be granted, as he was willing to receive them all. A revocation or alteration of the decree of banishment was not asked for; for this reason amongst others, that a longer stay in the Tyrol under such circumstances could not have been desirable to the protestants themselves. In fact, immediately after the departure of the king's chaplain from Berlin, on the 23rd of May, 1837, the Zillerdalian deputy to the king of Prussia arrived to solicit a quiet habitation for the victims of intolerance: this was the already-mentioned Johann Fleidl. He presented to the king a petition, drawn up almost entirely by himself, which we regret the limits of this extract prevent our inserting: it will be found in the "Quarterly Review."

This letter speaks for itself; there is a heartiness and an openness about it which convince the reader at once of the truth of its statements; there is a tone of independence which spurns the idea of appearing as a beggar, and at the same time an honest avowal of the real circumstances of the exiles. Two-thirds of them had by honest industry acquired property; they did not, therefore, issue forth as a horde of needy adventurers. Their renunciation of popery was not a profitable speculation, but a measure involving certain loss for the present, and the risk of temporal ruin for the future. Some amongst them were poor, and might perhaps require the assistance of Christian charity; and this they present to the consideration of the Prussian mo-

narch. It is needless to say that this petition met with the attention which it deserved. Whilst Fleidl was urging his suit at Berlin, Dr. Strauss was successfully advocating the cause at Vienna.

The Zillerdalers were delighted with the actual results, and set themselves vigorously to make preparations for their journey. The Prussian government behaved towards them with great consideration as well as good faith. Dr. Strauss met deputies from Zillertal at Kreuth, and communicated to them the ecclesiastical relations of Prussia; and a councillor of state was commissioned to explain the civil duties to which they would, by settling in that kingdom, become liable. They were perfectly satisfied: they therefore began with alacrity to build the carts and wagons for the journey, and to dispose of their houses, lands, and other effects: they soon found purchasers, and, contrary to expectation, were successful in disposing of them on favourable terms. The husbands, wives, children, relations, however, who wished to remain behind in their native land, were compelled to swear, "That they would never know any thing more of the emigrants;" a fact which shows that the popery of the present day is just the same as it was a hundred years ago, when it imposed a similar oath upon the Salzburg exiles, and that it is at all times devoid, not only of mercy, but of the common feelings of humanity. It is, however, but fair to add, that the Austrian government did not require the payment of the emigration tax, and even furnished the poorest of the exiles with the pecuniary means of pursuing their journey.

Fourteen days before the expiration of the appointed term, the wanderers were ready, and the first division commenced their pilgrimage. The farewell to their homes and their friends was rendered still more trying by the last words of those who had been their enemies and persecutors. The bigots among the peasants now relented, and met them with every expression of regret; protested that they had no idea that their conduct would have led to a result so serious and so sad, and besought them to change their mind; urged upon them that their exile would bring disgrace upon the Tyrolese name, and made them tempting offers of temporal ad-

vantage if they would remain in the church. One poor family, with seven children, had their effects packed upon a small cart or truck, ready for departure the following morning, when a rich relation came and offered the father a handsome freehold farm, if he would adhere to Romanism. "I am not going to sell my religion," was the calm reply. Even the priests did something to direct public attention to the exiles, though it must be acknowledged they did it in their own way. On the boundaries of the valley of Kützen, one took for the subject of his sermon, "The judgment of God upon the Lutherans;" in the course of which he showed the hardship of allowing them to carry away the sum of 200,000 imperial florins: "But my devout hearers," said he, "they will spend a great deal of it on the road, and soon get rid of the remainder. Prussia is a poor land; the necessities of life are all dear there, and even mouse-flesh is sold for money." This sermon shows, however, that the impression on their Romanist neighbours was not that want had compelled them to emigrate. The fact is, they brought into Prussia 50,000 reichsdollars, and about as much more remained due to them in their native valley.

According to the wish of the Austrian government, they took the route through the Imperial States, Saltzburg, the Archduchy Moravia, Bohemia, and in several divisions. The first, consisting of one hundred and fifty souls, passed through Linz on the 7th September. As soon as the protestant congregation at Rützenmoos heard that a second division was to follow, they sent deputies to them as far as Bocklabrug to invite them to partake of their hospitality, and to attend the Divine service on September 8, the festival of the nativity of the Virgin Mary. Here the majority for the first time entered a protestant church. The pastor, Trautberger, preached upon the 23rd Psalm; immediately after, the commissary of the march summoned them to proceed on their journey. This division was more numerous than the first, and amounted to two hundred souls. To every two or three families belonged a common wagon drawn by horses. Many of the poor dragged along a small two-wheeled covered cart, containing their effects and their children. Amongst these was

Johann Fleidl, upon whose cart sat his mother and four little children. On the Saturday they arrived in Scharten, the residence of a Lutheran superintendent, where the inhabitants received them into their houses, but where they had to encounter the first manifestation of popish unfriendliness. Even a priest participated in the guilt of this unkindness, and said, "You are going to the place to which you properly belong, the desolate Riesengebirg: very few of you, however, will get so far; most will perish on the road through Bohemia."

"That does not alarm us," answered an artisan: "if we live, we live to the Lord; if we die, we die unto the Lord." A third and fourth division speedily followed, and passing through evil report and good report, kindness and unkindness, they came at last at Michelsdorf to the borders of that good land which the providence of God had opened to them, and which, if it did not flow with milk and honey, promised them the free enjoyment of that word which to the psalmist was "sweeter than honey and the honeycomb." The pastor, followed by a large portion of his flock, went forth to welcome them, and to say, "Come in, ye blessed of the Lord." It was a touching sight. At the head of the train advanced the fathers and mothers, tall and well-proportioned figures, wearing the well-known Tyrolese hat, and clothed in the costume of their country. It was easy to perceive that the clothes had all been newly provided for the journey. Saturday the 23rd, at noon, came the second division, weary and wet from the heavy rain which had continued for several days; on the 30th, the third; and a few days after, the last and the smallest train. Schmiedeberg was to be their first halting-place and temporary home, until the intended settlement could be prepared for their reception; and here, on the 8th day of October, they observed a day of public thanksgiving to God for their safe arrival. The Tyrolese assembled on the great open place before the church, at the doors of which stood the clergy to receive them. The hymn was sung—

"When Christ his church defends,
All hell may rage and riot."

The church doors were opened, and the clergy led in the people, whilst another hymn was sung—

"Up, Christians, ye who trust in God,
Nor let men's threats affrighten."

The exiles occupied the seats on the right and left, immediately before the altar. The service began with the hymn—

"In God, my Friend, I put my trust."

Then followed an address from the altar, and all concluded with the hymn—

"Now thank God one and all."

The church could hardly hold the crowds that streamed from all sides to take part in the solemnity. A few days after this, all the heads of families, as well as unmarried individuals, were summoned to the town-house, where they were presented with Bibles. The government at once made provision both for the schooling of the children and the instruction of the adults. A school-master from the royal seminary, in Buntzlau, was immediately appointed to the charge. From the hours of eight to twelve more than eighty Tyrolese children receive daily instruction, and from two to five, ninety, adults. The instruction is stated to be in reading, writing, arithmetic, singing, and Bible history. From four to five, more than twenty old people, at their own request, are taught to read, that they may be able to read the Bible themselves.

Soon after their arrival, nine members of the congregation went to their eternal rest. The cholera, which prevailed in the town at the time, carried off five; but even these had calmness in their last moments, and expressed their humble thankfulness to God.

Ignasius Hauser, an old man, and for three years previously crippled by paralysis, came with his will ready made in his pocket. A feeble matron, who had passed her eighty-first year, continually urged her children during the journey, to make haste, lest she should die in the land of persecution and inhospitality. The prayers of both were heard, and within a few days after the close of their toilsome march, both were permitted to close their eyes in peace. One of the women gave birth to a child within an hour of the arrival. The family of the Count von Schulenburg hospitably received her into their mansion, and the noble host subsequently presented the child as sponsor at the font, where she received the name of Frederica Wilhelmina. Some marriages also soon followed. During the winter, they were

taken care of in Schmiedeberg, and in summer entered upon their new possessions in the domains of Erdmannsdorf, where each obtained a house and farm suitable to his means and his former position in the Tyrol. The colony itself has received the name of their own home, Zillerthal. Reports have, we know, been circulated, that the exiles are discontented, and already wish to emigrate again; but nothing could be more untrue. Those of the labouring class who were accustomed to leave the Tyrol annually in search of employment continue their periodic migrations, and are readily furnished by the Prussian government with passports for the purpose. The great majority, whom no such necessity compels, remain stationary: all are happy and thankful for the kindness with which they have been received, and the liberty of conscience which they enjoy.

Such is the simple narrative of this Austrian oppression, and of the happy deliverance of its victims. Prudence forbade the fires and massacres, the dragonades and confiscations of former centuries; but the denial of justice, the withholding of the religious liberty guaranteed by the law, the refusal of Christian burial, and the most barbarous and unnatural prohibition to enter into the marriage state, concluded at last by an expulsion from house and home, can be designated by no milder term than that of persecution. When protestants speak of the flames of Smithfield, or the horrors of St. Bartholomew's night, they are told that these things are not to be imputed to the religion of Rome, but to the barbarism of the age. They then point to the unprincipled perfidy which suggested, and the wanton cruelty which accompanied the revocation of the edict of Nantes; but again the times are made to bear the blame. The Salzburg persecution, conducted by a Romish archbishop, rises up in the protestant mind as proof that in the eighteenth century the practice of popery was still the same; but it is once more replied that the true principles of civilization and toleration were not understood till within the last forty years. The history of the Zillerdale exiles comes to testify that even in the present age of supposed illumination the system of Rome remains unchanged—as intolerant, as tyrannical, as faithless, as it was in the darkest of the ages that have passed away.

OLD HUMPHREY ON COLLECTIONS IN PLACES OF DIVINE WORSHIP.

So long as Old Humphrey is content to scribble about his own infirmities, to relate whimsical occurrences, or even to generalize on the errors of mankind, he is not likely to offend many of his readers; but when he sets up any individual error as a target to fire at, and takes a steady aim, he runs some risk of making himself enemies.

Now it so happens that I have been taking myself to task rather sharply, in a matter that is to my reproach; and, possibly, I may be killing two birds with one stone, if I repeat to you the substance of what I have already said to myself. You see I take it for granted that you may be as faulty as I am.

But should it so happen that you are altogether free from error in this particular case, you may make my remarks useful in applying them to any other error into which you may have fallen. A man who has no wart on his finger, may have a corn on his toe; he may be all right in the head, yet be somewhat unsound in the heart; he may be altogether free from one disease, and yet require a little medicine for another.

This last remark about medicine serves to remind me how often in the course of my life I have made a bitter draught more nauseous by pulling a wry face and increasing my antipathy against it, when, by taking it cheerfully and unhesitatingly, I might have spared myself great annoyance. Do not you, on the present occasion, follow my bad example.

Notwithstanding the large sums of money which are sometimes collected by Christian congregations, and the instances that occur of individual liberality, there are few occasions on which niggardliness is more generally manifested than in collections for the support of the gospel. Without indulging in uncharitable remarks, common observation is enough to convince us of the fact, that to evade a collection, or to contribute to it the least possible sum that decency will admit, is a common practice among professedly Christian people.

This niggardly acknowledgment, or rather this practical denial of our attachment to Divine things, is accompanied with so little consciousness of shame, that even disguise, in many cases, is not resorted to: surely this infirmity ought to bring a blush on our cheeks.

When do any of us in our pleasures,

in our journeys, in our visits, in the reception of our friends, or in the purchase of any article of dress, make the same hesitation in the expenditure of a half-crown or a shilling, as we do in the case of a collection? And is, after all, the ever blessed gospel of truth, with all its consolations for time, and its glorious hopes for eternity, a thing of so little consequence with us as to be weighed in the balances against a shilling? Christians! Christians! let us take the matter more to heart, and not thus acknowledge to ourselves, and proclaim to others what a trifling value we put upon the gospel.

The celebrated Dr. Franklin was once listening to a sermon when he expected there would be a collection. His mind, however, was made up not to give a single farthing. He had in his pocket at the time five pistoles in gold, three or four silver dollars, beside a handful of copper money.

As the minister proceeded in his discourse, the doctor began to relent, and thought to himself that he might as well part with his copper. Soon after this he was so much affected by what fell from the minister's lips, that he considered his copper would be too small an offering; his silver dollars were thus placed in a dangerous position. On went the minister, and in so eloquent and persuasive a manner that by the time he had finished, the doctor was determined to do all he could for the cause which had been so ably advocated, so he poured into the collector's dish the contents of his pocket, copper money, silver dollars, and golden pistoles altogether.

I cannot tell whether in the instance I have related Dr. Franklin was moved to act in the way he did because his judgment was convinced, or because his feelings were excited; but this I do know, that both our judgment and our affections, too, ought to prompt us to support the cause of the gospel. Now let me come a little closer to you in my remarks.

Did you never, when preparing to set out for the house of God, in recollecting that a charity sermon, or a collection was appointed for that day, suddenly feel an unusual desire to be profited by the ministry of some servant of the Most High, whom you had never heard, and who preached in a place of worship that you had never before entered?

Did you never actually, on such an occasion, "go farther, and fare worse" than you would have done in hearing

your own minister, returning home more than half dissatisfied with yourself for the course you had taken ?

Did you never, after putting yourself to much inconvenience to avoid one collection, stumble upon another, giving your money grudgingly, and resolving never again to be caught by a trap of your own baiting ?

Did you never, after having made up your mind to give a certain sum, settle down into the prudential belief that half the amount would be more consistent with your circumstances ?

Did you never, after having been wrought up to unwonted liberality by the affectionate earnestness and pious fervour of a Christian minister, cool in your resolvings, approaching the plate shorn of your strength and giving merely as another man ?

Did you never fumble in your pocket before a collection, holding in your hand a half-crown and a shilling, or a shilling and a sixpence, prepared to give the larger or the lesser coin at the door as circumstances might determine ?

Did you never give to secure the good opinion of the plate-holder, what you would not have given to the advocated cause ? In one word, have you, or have you not, over and over again, given that gladly to a human being, which you would have given grudgingly to God ?

I am ashamed to propose such questions, and perhaps some of you would be equally ashamed honestly to answer them. Away then with all parsimonious pinching and contriving, fumbling and shuffling, grudging and withholding in the Redeemer's cause. We have been mercifully dealt with: let us thankfully acknowledge that mercy, remembering that "the liberal soul deviseth liberal things, and by liberal things shall he stand." God has been good to us, let us at least show that we set some value on his gifts, and as the glorious gospel has been freely given to us, freely let us support it.

AGE AND DECAY OF PLANTS.

If Adam had never fallen; if the terrestrial paradise had continued in its primeval state, "when God planted a garden eastward in Eden;" and if the ground had not been cursed "for man's sake," there would, probably, have been no vegetable decay. Spring, summer, and autumn would, probably, have con-

stituted the complete chronology of the vegetable world; while there would have been no bleak winds to blight, no voracious vermin to destroy, nor diseases to canker the herb yielding seed, or the fruit tree yielding fruit after his kind upon the earth. Gen. i.

From the time "of man's first disobedience," every living thing has its beginning and ending, and undergoes innumerable changes. Our own infancy, youth, manhood, and old age are in strict parallelism with those of plants, which are subject to the same vicissitudes, and go through similar stages. In the stage of infancy, as it may analogically be called, plants are small, weak, and destitute of flowers and fruit; when more advanced, they are ornamented with leaves and flowers, being then most agreeable, and exulting as it were in the joyous spring of life; in adolescence, to continue the analogy, being more firm and strong, though partly losing beauty, they yield seed or fruit after their kind; and later in their progress, they droop, wither, and die, returning to dust, whence they came.

The Divine anathema, "In sorrow shalt thou bring forth," extends in some degree or other to plants as well as to animals, of which the following are a few striking illustrations which might be multiplied to an endless extent. When fish have deposited their eggs or roe, they become sickly, and lose their plumpness and beauty. When birds have finished the task of nidification and breeding, they droop and lose their brilliancy of plumage and colour, moult their feathers, and continue dull and mopish for several months. But the most remarkable instances of this may be observed among insects, most of which, if not all, die immediately, or soon after the fulfilment of the natural functions in breeding. So much is this the case, that when some species, such as moths and butterflies, are accidentally or artificially prevented from breeding, it prolongs their lives in a most surprising manner for months in succession. The day-fly (*Ephemera*) again, many species of which are common in Britain, in most cases lives only a few hours after it has attained the winged state, though the grub (*Larva*) has lived under water for one or two years. The fact of its transitory life is forced on the attention of the most incurious, by the immense numbers which sometimes appear and die within a single

day. The writer of this article, in the autumn of 1829, observed the square at Wiesbaden, in Nassau, strewn with the dead bodies of a large white winged species, giving the ground the appearance of being covered with snow, so great was the number of the ephemera, which had the day before immersed from the water of the Rhine and the Maine, adjacent to the city.

In the case of plants, again, the subject more immediately under notice, some flowers bloom but for a few hours of the day or the night, some for a few days, and some for a few weeks, while others continue to blossom for several months in succession.

The sort of plants termed annuals by gardeners and agriculturists, live, as the term implies, one year, or rather one season; that is, they live till they bloom and produce seed, when they wither and die; a process which, when it requires two seasons to effect, causes the plants to be called biennials, or two yearlings. Some of the most important plants, cultivated for human food, belong to annuals, while a few are biennial. Among the annual, we may mention corn or grain, fully described in the *Visitor* for October. That it is the blooming and seeding which causes, or at least is nearly synchronous with their decay and death, appears from the circumstance of wheat being sown in autumn, living through the winter, and ripening about the end of the following summer; while barley and oats are sown in spring, and ripen the same season.

Many garden vegetables, on the other hand, are biennial, such as carrots, parsnips, celery, parsley, onions, and leeks; while turnips and cabbage seem to hold something of a middle rank between the annual and biennial; at least, it is the object of the skilful gardener to retard, as much as possible, the process of blooming and seeding in those sorts, inasmuch as the roots, or leaves, on which their value as food depends, are immediately deteriorated by the process of blooming and seeding, because it requires all the nutriment derived from the soil to perfect the seed, and of course none remains for increasing the roots or leaves.

A very large proportion of ornamental as well as of useful plants, belong to the two sorts, annual and biennial, more particularly the first, which are so numerous, that the mere names of each would fill more space than can be

allotted in one paper. The biennials are more limited, and consist of sweet-williams, musk scabious, foxglove, Canterbury bells, hollyhock, Atkinson's coreopsis, evening primrose, and a few others. But any one of the annuals, which can be prevented from flowering during the season it has been sown, may be rendered biennial, while any biennial that is prevented from flowering the second season, may be rendered triennial, provided it be not cut off by the severity, or what is worse, the wetness of the winter months. It is a remarkable fact, that the prolongation of life in annuals, such as pheasant's eye (*Adonis*) and tall blue larkspur (*Delphinium*) improves them in luxuriance and beauty; while the prolongation of life in biennials, such as foxglove, (*Digitalis purpurea*), renders them sickly and dwarfish.

Plants of longer duration than two or three years, may, according to their species, produce flowers and fruit for an indefinite number of years, as the apple-tree and the oak; or may die when they have once flowered and fruited, like most of the palm trees and the aloe. In the Dutch gardens the plaintain tree has often continued barren for a hundred years; but after it has once flowered, no art, skill, nor experience can prevent its lofty stem from perishing the next year. The umbrella palm-tree (*Corypha*) is described as remaining barren for thirty-five years, during which period it may attain the height of seventy feet; in four months more, it will often rise as much as thirty feet higher, put forth its flower and fruit the same year; and when this is accomplished, it dies down to the root, like a stalk of rye-grass, or barley. The maguey, (*Agave Americana*), not uncommon in large garden boxes, set on a lawn or a terrace, will live for a hundred years in this country without flowering, its long spear-like leaves remaining fresh and vigorous; but no sooner has it sent up its magnificent spike of flowers, and ripened its fruit, than it withers and dies like a plant of marygold or mignonette in the flower border. It is reported that the elephant plant of the Cape of Good Hope, may attain the age of two hundred years, reckoning by the rings in the bark of the crown. The olive may live from two to seven hundred years. The oldest larch (*Pinus Larix*) in this country, and in all probability the first planted, is still

growing at Dunkeld, in Scotland, having, it is said, been brought from the East in the time of the crusades. When the writer of this article saw this tree a few years ago, it was still vigorous, and likely to live another century, at least.

The oak is one of the longest lived trees in this country. At Ellerslie, near Paisley, there is, or lately was an oak, called Wallace's tree, traditionally reported to have been planted by the patriot Wallace about five hundred years ago. Near the entrance of the water walk, in Magdalen college, Oxford, an oak tree stood, nigh to which the founder of the college, in 1448, ordered it to be built. The tree must, consequently, have been old and large, when the founder, at this period, assigned the northern boundary of Magdalen to be the great oak. We may suppose it to have then been not improbably between three and four hundred years old, and to have been planted about the period of the Norman conquest. This ancient oak of Magdalen fell in 1789, three hundred and forty-one years after the founding of the college. It was then about seventy-two feet in height, about twenty-two feet in girth; but was much decayed at the root, and hollow in the stem.

The rapidity with which the oak attains a considerable size is shown by Mr. Marsham, who planted one in 1720, and in 1790 it was found to measure, at one foot from the ground, no less than twelve feet and a half in circumference. It is true that this was artificially increased in growth by washing the stem, and digging round the roots as far as they were supposed to extend, and manuring and mulching them with saw-dust, etc. Mr. Marsham deems the great oak in the Holt to be the largest in the island, measuring thirty-four feet in circumference at seven feet from the ground, and estimated to contain one thousand feet of timber. Professor De Candolle, of Geneva, describes oaks of the age of 870, 1080, and 1500 years.

The cedar of Libanon is another long-lived tree, and the same writer mentions one of the age of at least eight hundred years.

Chestnut trees are recorded to have lived for nearly a thousand years; so that the fine trees in Greenwich park, planted by order of James I., may be considered as still comparatively young. The ancient tree, mentioned by Camden as the great chestnut of Tamworth, is

probably (if it still stands) the largest and oldest tree in England, and is adduced by Ducarel as proof that the chestnut is indigenous in the island. In the reign of Stephen, who ascended the throne in 1135, it was deemed so remarkable for its size, that, as appears upon record, it was well known as a signal boundary to the manor of Tamworth, in Gloucestershire; and as such, it is mentioned in the "*Sylva*" of the celebrated Evelyn. At the former period it may be supposed to have been in its prime. Supposing that, like the oak, it requires about three hundred years to bring the chestnut tree to perfection, this would call us back, for the origin of the Tamworth chestnut, to the reign of Egbert, more than one thousand years ago.

The very extraordinary dragon's-blood tree, in the island of Teneriffe, is computed to be not less than two thousand years old.

Mr. Strutt, in his "*Sylva*," mentions yew trees, at Fountains Abbey, which are said to have sheltered the monks when the abbey was erected in the year 1132, and were probably planted by one of the Saxon monarchs. M. De Candolle records yew trees severally to have lived 1214, 1458, 2588, and 2880 years.

Forbes, in his "*Oriental Memoirs*," describes a burr tree, on the banks of the Nerbudda, as throwing down its branches in lofty arches to the ground, where they take root and multiply, as it were by layers, each rooted branch becoming a new tree, and the successive trunks forming beautiful walks and vistas. The leaves of this tree are large, soft, and of a lively green. The fruit is a small fig, of a bright scarlet colour when ripe, and affording sustenance to monkeys, squirrels, peacocks, and numerous other birds which dwell among its branches. The Hindoos look upon its long existence, its outstretching arms, and grateful shade, as emblems of the Deity, and venerate it almost as much as one of their false gods. Time has effected great changes in this celebrated tree. High floods have swept away a considerable portion of it; but what remained, when it was visited by Forbes, measured nearly two thousand feet, while the dependent boughs, not then struck in the ground, covered a much larger space.

This tree is supposed to have been described by Nearchus, who says, it covers a circumference of five acres, and has been known, during the march of an

army, to afford shelter under its boughs for ten thousand men. If this tree be supposed to have been only three or four hundred years old at the time of Alexander, or three hundred and twenty-five before Christ, its present age would be 2164 years.

The age of trees can be, in most cases, easily calculated when they have been felled, by counting the number of rings in the wood; one of these rings, at least in temperate and variable climates, being formed every successive year, by the ascent of the sap in the spring, and the formation of alburnum and wood during summer. In logs of wood, which may be seen in every timber yard, the age of the trees may often be observed to be from fifty to one hundred and fifty years, an age, as we have already seen, comparatively small, when compared with some of the patriarchal trees of the forest.

J. R.

ILLUSTRATION OF SCRIPTURE.



"Thou puttest my feet also in the stocks."—Job xiii. 27.

"The jailor thrust them into the inner prison, and made their feet fast in the stocks."—Acts xvi. 24.

WE read of stocks of different kinds. In China, the Kan-ghe, or wooden ruff, used in punishing theft, is a kind of portable pillory, formed of two pieces of wood, hollowed in the middle, to fit the neck of the offender, and so broad that the wearer can neither see his own feet, nor put his hand to his mouth, and consequently he must be beholden to some person for his food. Its weight depends on the nature of the crime, or the favour of the mandarin; the lightest are about forty or fifty, and some of them even two hundred pounds weight; and so troublesome are they that many through hunger, pain, and want of sleep, die while suffering this severe punishment.

Michaelis mentions stocks with five holes: that is two for the feet, two for the hands, and one for the head; the prisoner is thus kept in an unnatural

position, which must produce intolerable torture.

Roberts states that the records of the East bear testimony to the commonness of this punishment from the most remote antiquity. According to the representation he has given, the culprit has to lie with his back on the ground, having his feet fast in one pair and his hands in another. All he can do, therefore, is to writhe his body; his arms and legs being so fast that he cannot possibly move them. A man placed in great difficulty, says, "Alas! I am now in the stocks!" a state of which the language of Job is singularly expressive.

It is very possible, that Paul and Silas were subjected to similar suffering, and this would be more than ordinary if they lay with their bare backs, so lately scourged, on the hard and dirty ground. Yet notwithstanding a condition so afflictive, "they sang praises unto God." What a contrast did they thus present to the ungodly, when bearing the punishment of their crimes; and what a proof did they furnish of the faithfulness of Jehovah to his consoling and animating word! Infinitely preferable is the condition of the afflicted believer, beneath whom are placed "the everlasting arms," to that of the ungodly possessor of an empire or a world.

COTTON SPINNING.

THE use of cotton clothing spread very slowly, except when urged onwards by Mohammedan conquest and colonization. The cotton spinning manufacture was general in India, and had attained great excellence in the fifth century before Christ; yet eighteen centuries more elapsed before it was introduced into Italy, or Constantinople, or even secured a footing in China. In Italy, Germany, and Flanders, it had a lingering and ignoble existence. To suppose that the same manufacture ever existed in any other part of Europe which now exists in England would be a great mistake.

For a long period no material improvement took place in any country in the implements by which cotton was spun and woven. The implements used in all parts of the earth from the earliest times were the distaff and spindle. The only advance made in this department was in changing the distaff for the one-thread spinning-wheel, which has long

been used in India for the coarse qualities of thread, and which has also obtained in China and in all European countries.

At a time within the remembrance of those who are now aged, the high-wheel, as it was called, might be seen in almost every cottage and farmhouse. The body was a right-angled block of wood, of about three feet in length, nine or ten inches in breadth, and two inches thick, and was supported in an inclining position by four round legs, such as are generally used in a common three-footed stool. On the far side of the lower end was fixed an upright support, about thirty inches high, at the top of which was the axle or peg, on which the wheel turned round. This wheel was very light in its make, and consisted of a thin rim, about four inches broad, fastened to the nave by about a dozen light ornamented spokes. At the higher end of the block, was the support for the spindle, which, furnished with a whorl, that is, a small pulley cut in grooves for confining the wheel-band, turning in two projecting pieces, called gudgeons, of stout sole leather, the spindle itself, of well-polished steel, or wood, projecting about nine or ten inches from the wheel, a band of twisted linen and worsted ran round the wheel and the whorl, by which motion was given to the spindle, and the operation of spinning performed; and when it is considered that the whorls were not more than an inch, or an inch and a half in diameter, while the wheel itself was nearly five feet, the spindle will be seen to have had a very considerable velocity.

In applying this machine to use, a roll of wool, taken from the card, about twelve or thirteen inches long, and very light in texture, was applied by the left hand of the spinner while at the same time she touched the spokes of the wheel with her right, to give it a gentle motion, and attach the new wool to an old half-spun thread, left for the purpose on the spindle; she then turned more rapidly, keeping the wool in her left hand, and, stepping backwards at the same time, drew out the thread, still keeping the right hand upon, or near the wheel, to regulate the motion, and her left arm rather extended, she continued to step backwards till she got to the utmost length of the thread which the roll of wool would produce; when, reversing the motion of the wheel to take up the

thread already spun, she stepped forward and attached another roll of wool, repeating the operation as before.

The high-wheel seems to have succeeded the distaff, and was a very great improvement on that machine. As it was formerly spun, all the yarn or worsted was used for stockings, or for weaving with linen thread into the cloth called "linsey-wolsey," which was the general wear of peasants, as jackets and trousers for boys, and frequently for men, and for petticoats and other garments for women.

The low-wheel was an improvement on the high-wheel, and was intended at first for spinning flax, or as it is generally called, "tow." At this the spinner is seated, and motion is given by a treadle worked with the foot. To prevent the travelling necessary in the use of the high-wheel, it was quickly adapted to the spinning of the finer kinds of wool, and was found to produce a thread of yarn of superior fineness. In almost every farmhouse the wheel was the evening fireside companion, and sometimes, while the mistress was spinning fine tow, the servant-girl was allowed to spin harding for herself, after the end of the day's labour.

About seventy years ago, the centre of a period of almost uninterrupted peace, Manchester, as well as many other commercial towns, continued to make rapid strides in wealth, population, and manufacturing skill. Still the weaver was continually pressing on the spinner. British talent, however, removed this obstacle. John Wyatt, of Birmingham, invented a mode of spinning, by means of two or more pairs of small rollers placed lengthwise, and as the cotton was passed through these, it was drawn out, and afterwards twisted into a thread, and wound on a bobbin. A machine was thus made to do what formerly, in all ages and countries, required the fingers of the spinners, even better than they could; and, what is more, twenty, fifty, a hundred, or even a thousand threads could be spun by one pair of hands!

Meanwhile, a man named Hargreaves first made a machine in the county of Lancaster, which spun eleven threads; it was called the spinning-jenny; and though illiterate and humble, he must be considered as one of the greater inventors and improvers in the cotton manufacture. The date of his invention was some years before Arkwright obtained his

patent for his water-frame, and it differs so completely from that and from Wyatt's machine, that there can be no suspicion of its being other than a perfectly original invention. He is said to have received the first idea of it from seeing a one-thread wheel overturned on the floor, when both the wheel and the spindle continued to revolve. The spindle was thus thrown from a horizontal into an upright position, and the thought seems to have struck him that if a number of spindles were placed upright, and side by side, several threads might be spun at once.

These inventions were of great service. The new machine not only turned off a much greater quantity of yarn than had before been produced, but it was also of a superior quality. The warps, or threads of the cloth which run lengthwise, had always been of linen, but now the water-frame spun hard and fine thread fit for warps; the warps of linen-yarn were therefore abandoned, and goods, for the first time in this country, were woven wholly of cotton. Manufactures of a finer and more delicate fabric were also introduced, especially calicoes, imitated from Indian fabrics of that name. The jenny was particularly adapted to spinning weft, so that the two machines, instead of being opposed, were used together.

Now the factory system arose. Hitherto the cotton manufactures had been carried on almost entirely in the houses of the workman; the hand-cards, the spinning-wheel, and the loom required no larger room than that of a cottage. A spinning-jenny of a small size might also be used there, until, when made larger, workshops were needed. But now the machines employed required more space than that of a cottage, and more power than that of a human arm; their weight, also, made it needful to place them in strongly built mills, and they could not be maintained by any power then known but that of water.

But though these machines were invented, much remained to be done. The water-frame spun twists for warps, but it could not be used with advantage for the finer qualities, as very fine thread was not strong enough to bear the pull of the rollers when winding itself on the bobbins. A machine was now invented, therefore, by Samuel Crompton, called the Mule, or the Mule-Jenny, for, like the water-frame of Arkwright, it has

rollers to reduce the roving, and, like the machine of Hargreaves, it has spindles without bobbins to give the twist, and the thread is stretched and spun at the same time by the spindles, after the rollers have ceased to give out the rove. Before this time it was thought impossible to spin eighty hanks of cotton to the pound: but as many as three hundred and fifty have since been spun, each hank measuring eight hundred and forty yards, and forming together a thread a hundred and sixty-seven miles in length! It was therefore justly entitled to one of its early names, the muslin wheel, from its making yarn sufficiently fine for the manufacture of muslin. Improvement has, however, continued and is still going on. Mules once required the aid of a spinner; but now, all that is needed by what are called self-acting mules, is the aid of children who join the broken threads.

What a change has thus taken place! Little more than sixty years since, even thread used in the manufacture of cotton, wool, worsted, and flax, throughout the world, was spun singly by the fingers of the spinner; but now, several thousand spindles may be seen in a single room, moving with amazing rapidity, without a single hand to guide or urge them forwards, drawing out, twisting, and winding up as many thousand threads, with exactness and power the most astonishing. Still, what art can equal the threads of insects? The mechanism by which they are produced is stamped with Divine perfection, compared with which the finest specimens of art are coarse and clumsy.

THE LAST EVENING OF THE YEAR.

ON the evening of the last thirty-first of December, I had been cherishing the humiliating and solemn reflections which are peculiarly suitable to the close of the year, and endeavouring to bring my mind to that view of the past, best calculated to influence the future. I had attempted to recall the prominent incidents of the twelve months which had elapsed; and, in this endeavour, I was led frequently to regret how little my memory could retain even of what was most important to be remembered. I could not avoid, at such a period, looking forwards as well as backwards, and anticipating that fearful tribunal at which no occurrence shall be forgotten; whilst my

imagination penetrated into the distant destinies which shall be dependent on its decisions. At my usual hour I retired to rest, but the train of meditation I had pursued was so important and appropriate, that imagination continued it after sense had slumbered. "In thoughts from the visions of the night, when deep sleep falleth upon man," I was mentally concerned in the following scene of interest:—

I imagined myself still adding, link after link, to the chain of reflection, the progress of which the time for repose had interrupted; and whilst thus engaged, I was aware that there remained but a few moments to complete the day. I heard the clock as it tolled the knell of another year: and, as it rung slowly the appointed number, each note was followed by a sting of conscience, bitterly reproaching me for my neglect of precious time. The last stroke was ringing in my ears—painful as the groan announcing the departure of a valuable friend—when, notwithstanding the meditative posture in which I was sitting, I fancied that the dimness of the apartment became brighter; and on lifting my eyes to discover the cause, I was terrified at perceiving that another being was with me in my seclusion. I saw one before me whose form indeed was human; but the bright burning glance of his eye, and the splendour which beamed forth from every part of his beautifully-proportioned form, convinced me, at a glance, that it was no mortal being that I saw. The elevation of his brow gave dignity of the highest order to his countenance; but the most acute observation was indicated by his piercing eye, and inexorable justice was imprinted on his majestic features. With a trembling which convulsed my frame, I heard his unearthly accents. "Mortal," he said, "thou wast longing to recall the events of the past year: thou art permitted to gaze upon the record of this book. Read, and be wise." As he spoke thus, he opened before me the volume. In fearful apprehension, I read in it my own name, and recognized the history of my own life during the past year, with all its minutest particulars. Burning words were those which that volume contained: all the actions and circumstances of my life were registered under their respective heads in that dreadful book. I was first struck by the title, "Mercies received." Some were

there, the remembrance of which I had retained; more which were recalled, after having been forgotten; but the far greater number had never been noticed at all. Oh! what a detail of preservations, and deliverances, and invitations, and warnings, and privileges, and bestowments! I remember that "Sabbaths" stood out in very prominent characters, as if they had been among the greatest benefits. In observing the recapitulation, I could not but be struck with one circumstance: it was, that many dispensations, which I had considered curses, were enumerated here as blessings. Many a woe which had riven the heart, many a cup whose bitterness seemed to designate it as poison, was there, verifying the language of the poet—

"E'en crosses from his sovereign hand,
Are blessings in disguise."

Another catalogue was there: it was the enumeration of "Transgressions." My hand trembles as I remember them. What an immense variety of classes! Indifference, thoughtlessness, formality, ingratitude, unbelief, sins against the world—against the church—against the Father—against the Saviour—against the Sanctifier. Neglected Sabbaths, abused ordinances, misimproved time, encouraged temptations; there they stood, with no excuse, no extenuation. There was one very long class I remember well, "Idle words;" and then the passage flashed like lightning across my mind; "Every idle word that men speak, they shall give account thereof in the day of judgment." My supernatural visitant here addressed me: "Dost thou observe how small a proportion thy sins of commission bear to those of omission?" As he spoke, he pointed me to instances in the page like the following:—"I was hungry, and thou gavest me no meat"—"I was thirsty, and thou gavest me no drink"—"I was sick, and thou didst not visit me." I was conscience stricken. In another part of the record I read the title, "Duties performed." Alas! how small was their number! Humble as I had been accustomed to think the estimate of my good works, I was greatly disappointed to perceive that many performances on which I had looked back with pride were omitted, "because," my visitor informed me, "the motive

was impure." It was, however, with feelings of the most affecting gratification, I read beneath this record, small as it was, the following passage:—"Whosoever shall give a cup of cold water only in the name of a disciple, he shall in no wise lose his reward."

Whilst I gazed on many other similar records, such was the intense feeling which seemed to be awakened within me, that my brain grew dizzy, and my eye became dim. I was awakened from this state by the touch of my instructor, who pointed me to the volume in which I had read my own terrible history, now closed, and bearing a seal, on which with sickening heart I read the inscription, "Reserved until the day of judgment." "And now," said the angel, "my commission is completed. Thou hast been permitted what was never granted to man before. What thinkest thou of the record? Dost thou not justly tremble? How many a line is here, which, 'dying, you could wish to blot!' I see you already shuddering at the thought of the disclosure of this volume at the day of judgment, when an assembled world shall listen to its contents. But if such be the record of one year, what must be the guilt of your whole life? Seek, then, an interest in the blood of Christ, justified by which, you shall indeed hear the repetition, but not to condemnation. Pray that your name may be found in the book of life. Time is before thee—seek to improve it; privileges are before thee—may they prove the gate of heaven; judgment is before thee—prepare to meet thy God." He turned to depart; and as I seemed to hear the rustling which announced his flight, I awoke from my dream.

I

TAKING CROCODILES.

THE fishermen in pursuit of the crocodile look for him in shallow parts, where some spots of the land project, with channels of water running between. In such places they find the crocodile basking on the land. On the approach of the canoe, he retires into the water, but goes only to a very little distance; and by paddling slowly on, and carefully observing the motions of the weeds and air bubbles that escape from his lungs, they soon discover where he is. They then fix loosely, on the handle of a long

paddle, a strong barbed harpoon iron, which is joined by a rope to the paddle; and, putting the harpoon gently down, find where the animal is. He is very sluggish, and does not move when they touch his side, so that they draw up the instrument, and thrust it into his back without any dexterity. The animal flounces a good deal, but never attacks the canoe, which one stroke of its tail would instantly send to the bottom. He often, however, shakes out the harpoon; after which, he neither seems to have an increase of ferocity nor shyness, but allows himself, as in the instance I saw, to be struck a second and third time, until he is secured and dragged on shore. He there flounces and snaps with his horrid jaws in a violent and dangerous manner; but a large bamboo being thrust into his mouth, he bites with such violence that he cannot readily disengage his teeth, and gives the people time to secure the gag by tying a rope round his jaws. He is then helpless. In the one which I saw caught, a ball fired through his head from a small fowling-piece instantly deprived him of motion; nor did he show almost any sign of sensation when, immediately afterwards, the harpoon was torn from his back. On the whole, the crocodile seems to be a stupid animal, and to make but a poor resistance, considering his great power and the tremendous force of the tail, jaws, and teeth with which he is provided. The hardness usually attributed to his skin will appear, from the above account, to have been very much exaggerated. I have seen the crocodile, however, move with very great velocity; and have no doubt that in the pursuit of fish it uses great exertions of this kind: nor does it seem to be entirely destitute of cunning, as crocodiles have been repeatedly found lurking in the fords of rivers through which high roads pass. Of this, indeed, I saw one instance, and am assured that it is not uncommon.—*Martin.*

PRACTICAL WISDOM.

THE actions of each day are, for the most part, links which follow each other in the chain of custom. Hence the great effort of practical wisdom is to imbue the mind with right tastes, affections, and habits; the elements of character and masters of actions.—*Robert Hall.*

EXPEDITION FROM SINGAPORE TO JAPAN.

THREE Japanese, the only survivors of a junk's crew of fourteen men, landed on Queen Charlotte's Island, and were captured by Indians, and afterwards redeemed by an English gentleman at the Columbia River settlement, and by him sent to England, and thence to Macao, where they were under the direction of H. M. chief superintendent, who placed them in the family of the Rev. C. Gutzlaff. Here they were employed in teaching him their language. Some time in March, 1837, four more of their countrymen, who had been wrecked in Laconia, arrived from Manilla. With the benevolent object of restoring these shipwrecked mariners to their country, the house of Olyphant and Co. despatched the ship "Morrison," Captain D. Ingersoll, for Yedo, the residence of the emperor of Japan. The following are some of the particulars of the voyage.

July 12th, anchored in the harbour of Napakeang, the principal harbour on the s.w. of Loo-Choo. Nothing could exceed the pleasantness of the morning. A novel and delightful scene presented itself. The distant appearance was beautiful, but the nearer view was still more so. As we approached the island, the sandy beach, and waters near were covered with fishermen. From the shore, the ground rises by gentle acclivities to high lands of a thousand feet. The bright shining tombs were seen from afar, and were at first mistaken for houses. Barren spots here and there interspersed the more verdant and apparently cultivated plateaux. Clusters of pines with dense foliage, were dispersed over the sides and summits of the hills.

In a short time the inhabitants assembled in groups upon the beach, on the lofty eminences, and the house tops, among whom were men of distinction, and officers of the place, dressed in long flowing light robes.

We had been anchored several hours before a boat came off to inquire who we were, or what was our errand.

Amid all that is interesting in the face of nature, and novel to one who has never visited these seas, the moral condition of the inhabitants chiefly occupies the mind. From the dawn of creation, it may be, no prayer has ascended from them to the God of heaven; and no well grounded hope of future

and immortal glory, animated the successive generations of those who now slumber in yonder neat cemeteries, that meet the eye at every point. Oh! when shall this distant island receive the law of God, and be made happy by the gospel of Christ? Great God, who hast promised to thy Son, that his kingdom shall become universal, may it soon be added to his acknowledged possessions! So far as we know, several years have elapsed since the last European vessel was seen in this port. Could we conceive the curiosity which would be produced if a Japanese or Chinese junk should come, some beautiful morning, unexpectedly, into the harbour of New York or London, and anchor by the side of vessels of a totally different construction, containing men of different speech, complexion and costume; then might we imagine something of the curiosity and admiration of this people, unacquainted with the rest of the world, on beholding a foreign ship under similar circumstances, appearing on their shore.

About three P.M. some twenty men, mostly official characters, came alongside. Their first inquiry, on being received on deck was, "Do you understand Chinese?" They then asked whence we came, and what was our object. That we were Americans who had come to visit them, was the reply. They smiled at the idea of our being their guests. We soon heard a few words of broken English, and asked if the person who used them was Anyah? They replied in the affirmative. Soon after a second boat arrived, bringing fresh water, which was very acceptable. Anyah inquired in his stereotyped expression, "How many mans?" "Thirty eight." "Plenty mans. Have got guns." "No war-ship." Evidently all felt a complacency on hearing this. He inquired the length and breadth of the ship, etc. The natives were much attracted by Mrs. King, who was seated near her husband, and subjected to a close inspection by all, but without rudeness.

Some refreshments were presented to them, and received with zest. On seeing representations of persons who had been operated upon for tumors, and one of an amputated arm, they expressed surprise, and immediately asked if the patients recovered. Some sat down before these paintings, and gazed with

amazement. Having arranged with them for water and refreshments, they left us in very good mood, saying they would come next day and bring them.

FIRST VISIT TO THE SHORE.

Nothing had been said by either party respecting our landing, a liberty it had been resolved to take. Accordingly, after dinner, the pinnacle was lowered, and Mr. and Mrs. King, Mr. Williams, Captain Ingersoll, and myself, went ashore, upon the sandy beach contiguous to Abbey's Point, and remote from the usual landing. People from the opposite side of the harbour ran immediately through the town, to the place where we were. We had not proceeded far, before twenty or thirty natives gathered about us; men, women, and children at first, and afterwards officers. Mrs. King was no less an object of curiosity and attraction on land, than she had been on ship-board.

Having proceeded a quarter of a mile into the country, a female forty or fifty years old, came from her hovel with a little girl by her side to see us. Mrs. K. went forward to meet her, and offered her hand. The old lady embraced it, and looked up with admiration upon her delicate complexion and fine dress, as compared with her own, regarding her as a being of a superior order; an interesting exhibition of the simplicity of an untutored native. When Mrs. K. pulled off her glove, the poor woman uttered an exclamation, at the contrast of their hands. Her own were tattooed with dark blue parallelograms upon the back, corresponding to the joints of each finger: a badge of the married state. In less than an hour, nearly a dozen petty officers arrived, perspiring and panting, quite out of breath. We saluted them heartily, and complied with their wishes to go in one direction rather than another, as far as they accorded with our own. They beckoned us back to the ship. As our sailors and party were scattered in different directions, their forces, and also the crowd, were divided, some following one of us and some another; but Mrs. K. had the greater part. They ran on and stopped till she came up, so as to look her full in the face. The chiefs constantly cried out to the people to keep off. There was no great confusion. About two hundred people had assembled, when we

returned to the boat. We then rowed along the beach, passed a fort, and entered the anchorage of Japanese junks. The village was thronged with people of all classes, flocking together to view the sight. When we arrived at the upper end of the beach, we recognized our visitors, who made signs that we must not proceed. We backed oars, and came up to them, and saluting them asked for water. Some of the police drove back the people, striking them upon the legs with a rattan.

July 13.—At nine A.M. our official friends returned, bringing salt, eggs, melons, and water. They were most desirous to know when we were going away. We were informed that a ship like ours had arrived, and after beating off in the harbour for a time, had steered to the north-west. The presumption was that the Raleigh had come and gone, and we concluded to leave the port the next day for Yedo.

Supposing the Raleigh had arrived and gone, we concluded to get under weigh, but first went on shore to obtain a tract on vaccination, which was lent to an officer the preceding day.

Captain Ingersoll accompanied me. It was the most interesting of all our visits. Our friends met us at the landing place, and politely conducted us to the Chinese temple, and in the morning we went to another appropriated to the Chinese ambassadors. I took an early opportunity of presenting my book, and having provided a phial containing vaccine virus, with suitable lancets, I determined that it should be their fault if they did not obtain this invaluable modern discovery. Asking for a child to inoculate, I was told there was none; and on inquiring for a physician who might be intrusted with the business, the people said there was none present. Soon after, however, an old man with a grey beard flowing from his chin, came forward with a complete copy of the tract, having attached pieces of paper to several characters, which he wished me to explain. He inquired if children who had cow-pox were not liable to small-pox in old age, and was curious to know if the account of the discovery stated in the tract was true. It occurred to me that my old friend was a physician, an opinion which I still entertain, though no one informed me. He was much delighted to receive the virus and the lancets: but fearful of mistaking,

he wished the spot for inserting it, to be pointed out upon his own arm, and also to see the lancets used. Before the old gentleman was aware, his arm was inoculated in three places. The surrounding assembly burst into a hearty laugh to see how the reynard had been taken; and the old man perceiving his predicament, enjoyed the joke with his countrymen. It was fortunate the captain was present, for they had an opportunity of seeing the character of the true disease upon his arm, which had been vaccinated eight days before. The circular form of the sore, was also shown by a diagram in the pamphlet, so that he seemed to understand it fully.

This subject disposed of, the officers introduced their friends for medical advice, chiefly for cutaneous diseases.

The buildings were generally very poor, some of them not equal to an European sheepcote. Many do not exceed ten feet square, and six or seven feet high. The sides are made of thatched straw, which also constitutes their bed. Some houses were surrounded by a low wall of coral stone. Others had four stone pillars, one at each corner, with tiled roofs terminating in a point. The whole house contained but one room, without doors, windows, or fire-place. The buildings in the city were very small, and usually had tiled roofs. Some of the temples were rude buildings, with bamboo enclosures. I noticed at one of them that the roof was composed, first of a layer of straight small bamboo, half an inch diameter, upon which was a layer of gravel, and tiles over all. Far greater attention has been paid to the abodes of the dead, than to the habitations of the living, or the temples of their gods. Admitting their views of the future to be correct, they manifest in their care for the dead, a wisdom superior to those, who having a revelation of the future, and its infinitely greater importance, bestow their chief care upon their houses and persons.

The seven men were greatly delighted once more to behold their native shores. They sat upon the bowsprit, and eagerly gazed upon their "father land," bursting into expressions of fresh delight, as they recognized headlands, islands, and mountains familiar to them. Doubtless their spirits were much elated at the thought, that they might soon be restored to those who were dearest to

them on earth, and from whom they had been separated so long. That this might not be an imaginary joy, and in a few days exchanged for the sorrows of cruelty and confinement in prison, was the silent wish of every heart. However that might be, they fully expected a kind reception.

ARRIVAL AT OURÁ-GAWÁ, AND VIOLENT REPULSION—THE MORRISON FIRED UPON.

At eleven o'clock A. M. we heard cannons, and supposed it to be a signal for the capital, that a foreign ship had arrived. The heavy fogs and clouds that hung over the land, prevented our seeing the place of firing. We continued beating up for the harbour that the Japanese had pointed out to us as safe, and but eighteen or twenty leagues from Yedo. At length the weather became fair, and we saw the fortifications at the south of Ourá-gawá, with the smoke of the cannon; and soon after, to our discomfiture, the balls falling into the water half a league distant. Captain Ingersoll immediately made for the land on the west, one or two miles south of the fort: and finding eight or ten fathoms, anchored at about two o'clock P. M.

We had been at anchor but a short time, before fishing-boats came to us from all parts of the harbour. The people were very timid at first, but gradually approached us as we beckoned them to the gangway. A second boat came along-side, and an old man of sixty came on board, crouching servilely. As he led the way, the deck was crowded with natives: some of them carefully surveyed the magnitude of the vessel, and stood aghast as they looked up to the top of the masts. They were invited into the round-house, where Mr. and Mrs. King were sitting, but manifested no great curiosity at the sight of a foreign lady. They were treated with some sweet wine and other refreshments. Whatever they received, they carried to their foreheads and made a low bow. Few cared for wine, but the ship's bread was seized with avidity. A father having taken a piece, went to the boat and brought up his little girl, twelve years old, to receive another. All, Athenian-like, were eager for some curiosity, but were reluctant to impart of their own, such as pipes, fans, etc.

Mr. Williams obtained a writing

apparatus, consisting of a few hair pencils in a brass sheath, worn by the side, the only trinket they would give. A man with severe rheumatism, another with lippitudo, and others who had cutaneous diseases, were prescribed for, and one requested the extraction of a molar tooth.

Cards were distributed in Chinese among the more influential, requesting that an officer might come on board. A few were also written in Japanese by Mr. Gutzlaff, stating the name of our country, and wishing to have our communications forwarded to the emperor, that he might be the first to know our errand: we thought it best to give no intimation to the people; and with this view the Japanese we had with us, went between decks, and did not communicate with their countrymen.

July 31st.—At six A.M. the delusion in which we had reposed the last evening, was soon broken up. Instead of going early on shore as had been determined, we were looking about us for personal safety. During the night, cannon had been brought from the fort and planted on the opposite shore, whence they commenced firing as soon as they could well see the ship.

It is difficult to say which preponderated, the disappointment of our Japanese, or their indignation that Mr. King and Mr. Gutzlaff, who had been so kind to them, should be thus treated. They called it brutal, and wished they had an opportunity to inform the emperor of the officers of the station, that they might be executed. However they dared not to go on shore; they said it would be certain death to them. A spectacle was presented, that might move the hardest heart. The joy and hilarity of the preceding days, when they saw their native hills and waters, their mingled sensations of pleasure, hope, and uncertainty at the thought of seeing their parents and friends, were exchanged for the melancholy prospect of exile in foreign lands. Their countenances fell; they were dumb; their feelings inexpressible, and to all but themselves, unknown.

All requested to be carried back with us, unless their safety could be secured at Loo-Choo.

August 10th.—At three A.M. arrived at the entrance of Kago-sima bay and lay-to till morning, when a few boats

sculled along the shore, and others sailed up the bay. The gig was lowered, and with an officer and four men, two of the Japanese went on shore to obtain a pilot, ascertain respecting the place, and return in the boat. Instead of this they got into the first boat they reached, the officer being told they would go up to the nearest village, obtain more men to row their boat, and that they would then return to the ship. We stood up the bay till we came opposite the village. At eight A.M. saw the natives assembled on the beach, and a boat full of men coming off, among whom, to our agreeable surprise, we saw two Japanese in European dress. As the boat came near, we recognized one, with sword and sabre at his side. He was an officer, a middle-aged man, who carefully maintained his dignity, scarcely noticing the ship, or betraying any curiosity. He was obliging, and had brought a pilot to conduct us to a temporary anchorage, until communication could be had with higher authorities, when they would conduct us to a safe harbour. He said the country belonged to the prince of Satsuma, and that a boat had already been despatched to Kago-sima. He took Mr. King's despatches for the prince, including those prepared for the emperor at Yedo, and said a return would be received in three days. At two P.M. an officer returned the communications delivered in the morning, which we hoped had been forwarded to Kago-sima, the capital of Satsuma, saying a messenger had been despatched to the prince, that a high officer would visit us the next day, and that he had brought another pilot to conduct us to a harbour for the night. This officer, about fifty years old, was so sea-sick that he did not come on board, but cheerfully accepted some medicines for his sickness. Two boats with large cisterns of water were sent off immediately, but a squall prevented our taking it in. Fruits, etc. were to come the next day, though a recent famine in Japan had rendered all provisions scarce. The people informed our Japanese, that in the seventh month of the last year (July 1836) they had a gale of thirteen days, destroying all their crops. Ewaketchy went ashore, and said he was received with as much hospitality by the magistrate, as he could be by his own family. He attributed our failure at Yedo, to not letting

him and his companions communicate with their countrymen.

SECOND REPULSION FROM JAPAN.

August 12th.—We received no visit from the great mandarin, as we were promised, and it is not easy to describe our situation this morning. All was quiet during the night, but it was the calm that precedes the storm, and a fresh confirmation of the saying, that the Japanese are never more to be feared than when they appear the most friendly; for then they are seeking an opportunity to execute their treacherous intentions. At half-past seven, A.M., a fishing-boat, with half-a-dozen men came off, and at some distance, told the Japanese on board, that the ship had better put to sea, and said something of the officers firing upon us. Immediately warlike preparations were seen on shore. All doubt of their design was soon dispelled, when we saw a troop of several hundred soldiers in full speed upon the beach, making for a defile on the high bank, through which they ascended to the shelter of the fort opposite the burial ground. They had badges upon their backs which resembled knapsacks, except they were much broader, and came up higher on the shoulders. No sooner were they behind the fort than they commenced a promiscuous fire of musketry and artillery. We were anchored in a small bay, had seventy-five fathoms of heavy chain cable to be taken in; we were nearly becalmed, for the little wind we had was directly against our getting out; and we were not more than a third of a mile from the nearest point of high land, from which the muskets might have done us much injury, had it occurred to our foes to change their position. The captain, with his usual presence of mind, ordered a kedge anchor to be dropped on the starboard quarter, at a cable's length, so as to court the ship to the wind, and if possible to get out of the harbour, towards Kago-sima. Even the little breeze soon failed, and there was scarcely enough to steer the ship, which, loosed from her moorings, was drifting towards the shore, and a large perpendicular arched rock. Two boats were lowered, and with much ado, by help of ropes attached to the bowsprit she weathered the rocks. The firing from shore continued. There seemed no end to adverse influences. As soon as we

were well out of the anchorage, not only the wind, but also the tide was unfavourable. Soon, however, a squall sprang up, that raised our hopes of being speedily extricated. Although the ship was laid nearly upon her beam-ends by the suddenness of the squall, in a few minutes she was perfectly becalmed, and to our great annoyance, we discovered that they had opened their artillery upon us, on the opposite side from the village with which we first communicated. The current was then setting, the ship under the guns, and as we were in fifty fathoms water, it was not easy, especially in so strong a current, to anchor. The calm was momentary, baffling head-winds sprang up. Standing towards the place from which we started, we found the heaviest guns transported to a fore-land outside the harbour, whence they renewed their fire upon us, whenever we were on the tack in that direction. Thus we were for eighteen long hours between two fires, one on either side of the bay, which is from three to five miles broad, when flight was our only way to escape, as we had purposely left the ship's armament in China.

Had we anchored nearer shore, as the exposure of the outer anchorage tempted, we had been within reach of the muskets, and it had been impracticable to escape.

The joy excited in the bosom of the Japanese by going on shore and meeting with sympathy from the officers and people, and by free communication with their countrymen, (one stated that women and children wept as he related the tale of his past misfortunes,) was to be equalled only by a second extinction of their last hope. For a time their solicitude in common with others, for immediate safety, diverted their attention from reflections upon the sudden reverse of their prospects. But at length some of them manifested the strongest indignation. On the next morning, two shaved their heads entirely, showing they had abdicated their country for ever. All, to a man, declared that they would not go to Nagasaki, or be put ashore for any consideration, however fair the promises they might receive from government.

Nothing especially deserving notice occurred during the remainder of the voyage. We came through the channel of Formosa in sight of the Chinese

coast, and near Namoa communicated with some fishermen. One boat came off, wishing to purchase calicoes, for which they offered Spanish dollars. They were very friendly, and readily received some Chinese books which Mr. Gutzlaff gave them. It was the only opportunity we had during the voyage to disseminate the word of life. On the 29th of August we arrived safely at Macao.—*Journal of Dr. Parher.*

STRANGE CUSTOMS.

THE manners and customs of different countries are a source of much interest and information. We are, perhaps, somewhat too prone to believe that they spring from caprice, whereas, in many instances, they are occasioned by climate and necessity. Were the fur-clad Russian and the West Indian planter to exchange dresses, a mutual inconvenience would be sustained; and were the Laplander to travel in a four-wheel carriage, and the Englishman in a sledge, a like result would necessarily follow.

On arriving, for the first time, in a foreign land, few things strike us more forcibly than the manners and customs of its inhabitants. An instance or two of this kind made known to me by a friend, I will here give by way of illustration.

“One day,” said he, “my relation told me that he was going to market, to lay in a stock of meat, and gave me an invitation to accompany him; what was my surprise, when, instead of purchasing a few joints, as I expected, he bought a whole bullock at once, with several sheep, calves, and pigs. These were cut up into joints, and placed on a sledge, to be drawn away.

“No sooner did we return home, than the different joints were laid on a bed of snow, after which water was repeatedly thrown over them, until, by the rapid freezing which took place, they were completely encased with a thick coat of ice. Snow was then piled high over the heap. In this manner the meat continued fresh during the winter; every now and then a joint being dug out of the snowy pile, according to the wants of the family.”

This account much interested me; though it did not call forth my astonishment in an equal degree with the following relation which he then gave me:—

“One night,” said he, “not long

after I first arrived at Quebec, I heard, or fancied I heard, while in bed, a gentle padding on the snow beneath my chamber window; but being drowsy, I turned myself, and tried again to sleep. Some time after I felt as restless as before, for it appeared to me as though the same gentle padding, like the footfall of passengers on the snow, had been going on without intermission.

“In vain I attempted to persuade myself that it was a dream, I was then awake, and the sounds were distinctly heard, as if a number of people were following each other slowly through the snow.

“The night was cold, and I felt reluctant to quit my bed; for something very like fear had spread its influence over me: the thing was so strange, so unaccountable! I tried to reason myself into self-possession, but it was in vain; for the low, dull, heavy sounds were still continued. It was midnight when, wrought up to a feeling of desperation, I rose from my bed, and gently opened my casement, to ascertain, if possible, what it was that had so disquieted me.

“Judge what were my sensations, when, looking down from my window, I saw a funeral passing on slowly below. The sight chilled my very heart. I looked along towards one end of the street, when the sight of another funeral gave an additional thrill to my already almost petrified frame. Was it a reality, or was I under a most strange delusion? I looked towards the other end of the street, where, to my dismay and horror, a third funeral procession was moving towards me. I could bear no more, but hurrying back to my bed, I buried myself in the bed clothes, where I still heard, in imagination or in reality, the dull dreary sound of the footfalls just as before.

“It would be difficult to describe my emotions. That I had actually seen three funeral processions was certain; that I had heard the trampling of many others was no more doubtful; yet it seemed so extraordinary, so unaccountable a circumstance, that so many funerals should take place together, and especially during the night, that I really still entertained suspicions of my not having been wide awake. Glad was I when the morning dawn peeped into my dormitory, and still more glad when an opportunity arrived of having the midnight mystery unravelled.

“On mentioning the strange occur-

rence to a relative, not without some apprehension of being laughed at for entertaining superstitious fears, he explained to me, that during the severe frosts of winter, there was so much difficulty and expense in breaking up the ground to bury the dead, that the poorer people resorted to the practice of depositing their deceased friends unburied, in a temporary asylum, till the frost was over. No sooner did a thaw commence, than graves were dug, and a general burial of the dead began. The funerals, in such cases, usually took place during the night, and the number of them was frequently great."

The enigma was now solved, the midnight mystery was at once explained: my disquietude and my fears had arisen solely from a want of knowledge of the manners and customs of the people.

E.

TRUTH AND FALSEHOOD.

VERACITY, so commonly disregarded, is rendered by our intercourse with others a matter of solemn obligation. It relates to their knowledge or belief, capable as they are of being affected by the meanings, whether true or false, conveyed by our words or conduct; and consists in the strict conformity of language, and of action, when intended to supply its place, to what is incontrovertibly true, or to what we fairly conceive to be entitled to this character. Accordingly, when words are uttered, or acts are performed, to the violation of that accordance with fact which ought invariably to be maintained, the guilt of falsehood is incurred, and incalculable evils arise.

To this general rule there is a manifest exception, when fiction is avowedly employed in the pursuit of an appropriate end. When Jotham alone found means to escape Abimelech's slaughter of his brethren, and convened the men of Shechem, and addressed to them the oldest parable extant, Judges ix. 7—20, he was not chargeable with falsehood; for his language of reproach and censure was evidently figurative. Equally free from this sin was Elijah, when he taunted with the most palpable and acute irony the worshippers of Baal, by exclaiming, "Cry aloud: for he is a god; either he is talking, or he is pursuing, or

he is in a journey, or peradventure he sleepeth, and must be awaked," 1 Kings xviii. 27. Cases may occur too, in far different times, rendering the employment of fiction legitimate and valuable; it should, however, be sparingly and wisely employed, lest truth should be either directly or indirectly impeached. This is certainly the case when its real character is not perceived, and when it either tends to prepare for a departure from the right path, or is made to give countenance to any such deviations.

The infraction of the law of veracity, in all circumstances to be deprecated and deplored, is unhappily of such frequent occurrence, as entirely to efface, from some minds, a proper sense of its obligation and importance. Many speak and act as if falsehood were a virtue, and as if a proud and impious rebellion against Him who "is not a man that he should lie," might continually be waged with impunity. Truth, which as his gift ought to be cherished as inestimably precious, is with them the last thing to be maintained—the very first to be sacrificed. Should it be said, "They are the people of the world," "their relation to the father of lies is obvious," the assertion is admitted; but who will deny that among them are many wearing the cloak and the sacred name of religion? It has been affirmed, indeed, in the view of facts, the number of which is truly afflictive, that falsehood is the common vice of Christian professors. It is for them to cast off the reproach.

The compliments which pass so currently in social intercourse, are doubtless frequently received as of no real value, and consequently, are not lies; yet on any estimate dictated by sound principles, they must be pronounced utterly indefensible. "Putting away lying," says the apostle, "speak every man truth with his neighbour: for we are members one of another," Eph. iv. 25. The inspired teachers of Christianity, who enjoined gentleness and courtesy, have urged all that is necessary to social happiness; and a faithful adherence to the principles they inculcate, will avert not merely the reality, but the "appearance of evil." Only let this adherence be displayed, and there will be an equal solicitude to avoid an approach to the utterance of a falsehood, or the acting of a lie.

In such circumstances, too, untruths

will not be put into the mouths of servants, to prevent inconvenience being suffered by their employers. The mistress of a house will not direct her domestic to say she is "not at home," in order to keep off intrusions on her time or her company; nor will the man of business require his clerk or shopman to declare that he has no more of a certain article, though he has a large supply, because he is without confidence in the solvency of the applicant. On the contrary, there will be the moral courage that can utter a truth, though it may not be agreeable, while that delicacy should be manifested which vigilantly guards against all unnecessary offence.

It has frequently been assumed, that there are certain cases in which lies are innocent. It has been said, for instance, by Paley in his *Moral Philosophy*, that a falsehood is not criminal when the person spoken to has no right to know the truth; yet a scriptural philosophy would say, thus avoiding all difficulty, "Withhold the information." If it be not asked, there is manifestly no occasion to volunteer it; if it be, it may be as clearly and certainly refused.

In like manner it has been intimated, that a falsehood may be told to an insane person, when it tends to his benefit. To this doctrine, however, the authority may be opposed which forbids us to do evil that good may come. It is also worthy of observation, that while there ought to be, under all circumstances, an inflexible regard to principle, its dictates are enforced in this case by the testimony of experience. It is remarked, by M. Pinel, that "insane persons, like children, lose all confidence, and all respect, if you fail in your word toward them; and they immediately set their ingenuity to work to deceive and circumvent you." Yet this is only one instance out of a multitude of the same kind. Were the history of the world fully opened to our view, it would be at once apparent, that what morality affirms to be right, facts prove to be expedient.

In accordance with such subterfuges as have now been exposed, the afflicted are often told they are better, lest they should be discomposed by hearing that disease is advancing. Some disturbance of the mind would most probably be allowed, were any worldly arrangements to be made; but the truth must be kept from the ear of the dying, whatever be the peril to his spiritual interests! It is

difficult to speak in measured terms of such conduct; its atrocity is truly appalling; yet every lie partakes in a greater or less degree of the same character; and its origin and doom are alike: the regions of perdition! *again that W.*

A PASS IN ASIA MINOR.

THIS tremendous pass was rendered still more formidable by the obscurity of the night. Our approach to it seemed to be through the very bowels of the mountain, in the bed of a furious torrent, where no man could have imagined a path to have existence; and from which, turning up a narrow fissure, we scrambled on in the darkness, leaving all to the instinct of our horses, till we emerged, far above, upon the very brink of a black abyss, along which we still continued ascending by a narrow, rocky, zigzag path, paved here and there, but without any parapets, for a height of, I suppose, six or seven hundred feet. It was a frightful tug. You must know that the Turks do not frost or sharpen their horses' shoes, as we do, to keep them from slipping on the ice; and here all was ice and melting snow; and the track was on the very verge of the precipice: there was no getting off to lead the horses, or walk; we did not even dare to stop. It was neck or nothing; a breathless scramble up—up; often holding on by the mane to keep from slipping off behind. Nothing but the conviction of this, and of my own helplessness, embarrassed with great boots glued to the stirrups by ice, and our heavy cloaks frozen rigid as a board in their folds, could have kept me in the saddle. The descent was not so long, but fully as dangerous, and even more horrible, for there you were constantly looking down into the black yawning gulf, from whence the far off sound of the winter torrent came roaring up in fits as the wind sighed down the glen. The scenery was magnificent—perhaps darkness increased the effect. I do not know whether the mountains are very lofty, but the clouds were circling round each tall spiry cliff, as if they were propping the heavy sky. Daylight might have detracted from the grandeur and gloom—it scarcely could have lessened the toil or the danger; and well as I love mountain-passes and mountain scenery, I never desire to cross the Drekler-daugh pass gain in a stormy winter night.—*Frazer*

TEMPERANCE IN COLOGNE.

THE ancient city of Cologne, although situated in the very bosom of father Rhine, has so far lost the likeness of its parent, that it is said to count more than four times as many places for the sale of spirituous liquors as there are days in the year. The following is translated from the second number of a Temperance paper called the *Centralblatt*.

"These houses are found in every part of the city, with a branch of the juniper tree in front of them to attract general attention. Cologne, indeed has always so great a quantity of brandy in store, that it would be enough to intoxicate an army of Russians. The time from break of day until one P.M. is regarded as the proper season for the taking of brandy. Not that during this time the same visitors are continually found with a glass in their hand—they are continually going and coming. Then again late in the evening there is another proper season. The usual quantity of beer has then been consumed, and a few drops of brandy are required, as it is thought, to procure quiet sleep, and to prevent the fermenting of the beer, which continually strives to get the better of the unexpected visitor. In the whole city, therefore, the tavern-keepers are the last to retire, and the first to rise.

"Still, when compared to many other cities, the consumption of brandy in Cologne is moderate. People of rank, generally, do not drink it; though this rule is not without exceptions. Nor is the use of brandy common among the middle ranks of society; it rather extends over the poorer classes of the people.

"It is an awful fact that vast numbers in that city have become the victims of the use of brandy. It has deprived many of intellectual power; it has made them entirely vicious and degraded; it has occasioned unhappy marriages, poverty, misery, destruction, disease, and early death. And truly there are many who by the use of wine, in connexion with other vicious habits, have been drawn into the same gulf!

"You find there two places of meeting, different in degree, though not in kind. In the one, people are found who come to take a few drops, and who immediately after retire; in the other, you meet with all those who are toppers, in the true sense of that term.

"I now propose to acquaint the reader with the interior of a place of the latter description. The day I have chosen is the sabbath. There is a strange collection of people in that room. As soon as you enter, a dense stench of tobacco comes to meet you, and only with the aid of very strong lungs will you be able to continue. For the present you can only distinguish the forms, by which you are immediately surrounded. They seem covered with a thick veil. Those who are farther remote are entirely invisible until you approach them. It is at present only eleven o'clock, A.M. yet the twilight of evening prevails in the whole room.

"Some of these men have met with misfortunes: and who is there who has not met with them? But instead of bearing them as coming from the hand of a kind Parent, they have fled for refuge to the glass, to forget them. Others drink from ennui, because they have no regular occupation, and because idleness has become to them a second nature.

"These are toppers by profession, confirmed drunkards, who make the tavern their permanent residence, and who ask not whether it is morning, noon, or night. There only they are in their true element, like the fish in the water!

"Again there are others, who go there to drown occasional difficulties and troubles. The one cannot agree with his wife, another is vexed at the conduct of his sons, a third has suffered in his honour. Truly a most desperate means of obtaining alleviation or redress! In all cases of this kind, the use of brandy is calculated to destroy entirely the moral character of these men. Dreadful is the short feverish dream, but more dreadful still the hour of awaking.

"The younger portion of the lower classes of society is early accustomed to the use of brandy. There are many parents among those classes who set the most dangerous examples to their children, when they have arrived at the age of boyhood: they lead them into taverns, persuade them to the use of brandy; and find no end in praising them when they succeed in swallowing large quantities of brandy against their own inclination. There is no doubt that in Cologne these classes would rise much higher in intellectual cultivation, if brandy did not exist at all. I have repeatedly seen

young men of from fifteen to sixteen years of age, so entirely intoxicated, that they were wallowing in the gutter.

"This, my dear reader, is certainly not a picture likely to entice you to indulge in this habit. Is it astonishing that such an early discipline should give rise to unheard-of vices, and to fearful crimes?"

"Here in this corner, you see a tailor, once *a la mode*, but now a bankrupt, together with a shoemaker of the liberal stamp, who has his blue time, according to the German mode of speech, from sabbath morning to Tuesday evening. Without troubling themselves about the necessitous situation of their families, they, over a pint of fruit brandy, are discussing the abolition of the ancient guilds and corporations, and the pernicious freedom with which now every craft and trade can be engaged in. Those masons and carpenters on the opposite side, have left their scaffolding and their work, and with stuttering speech and unmeaning stare they learnedly discourse on the debates in the Chamber of Deputies, trace the movements of Don Carlos, and discuss the apprehended intervention of the French or the English. On the other side, a coachman and a man-servant unite in calling with a voice that is hardly intelligible, for another glass of bitters, while one of their associates lies near them with his head on the table and snoring. Several others are occupied in amusing the company with indecent wit and allusions. Journeymen, drivers, and labourers press in the mean time tumultuously near the bar, and ask for refreshments to wet their parched tongues. A serjeant and a trumpeter on the point of hastening to the parade ground find yet time to swallow a glass or two. Here four musicians are seated engaged in eating sausages with mustard, and washing them down, as you observe, with a quantity of spirits, which would lead one to suspect, that they, instead of a common stomach with all its usual appendages, have been favoured with the loan of the vessels of the Danaïdes. Here an old clerk or scrivener, who has gone through many a hard school, and on account of his dissipated life has lost his employment, now plays a lawyer's part, composes petitions to the several courts, endeavours to produce contention wherever he goes, and harangues his clients with a heavy tongue,

and under vain attempts to recover his centre of gravity. Near by you behold a disappointed man of genius. 'He is good for every thing,' some are heard to say; 'If he had turned his attention to physic, consumption itself could not have stopped him; and if he had become a soldier, truly he would have chased the Turks over the Hellespont. But really 'tis a pity for the poor rogue! He knows Latin and French, has studied algebra, plays the flute and the guitar; still he cannot succeed anywhere, for he is always two or three sheets before the wind.' At the table on the left, you observe an elderly gentleman. He has walked in former times on many of the roads that lead through high life; he has been a public officer, an author, a merchant, a restaurateur; yet he has never been successful, whether by his own fault, or not, I leave others to ascertain. In every case of change, he received his dismissal in the most revolting manner: this has disgusted him with society; he has entirely withdrawn from the region of the fashionable world, where indeed, according to his opinion, cabal and intrigue have an undisputed sway; he now lives in quiet retirement—for brandy alone!

"I could present to you still other biographies, but it seems hardly necessary in a place where the whole life of each individual seems inscribed in the most legible characters on every face!"
—*New York Observer*.

CONFESSION OF SIN.

"BEHOLD, I am vile," says Job. Vile, says Johnson's Dictionary, signifies worthless, base, despicable, impure. There is nothing in the world to which this applies so well as to sin. And it is to sin the exclaimer here refers. He does not call himself "vile," because he was reduced and poor. By this, no man of reflection would ever feel himself degraded. A horse is not valued for his trappings, but for his strength or his speed. Character is a personal thing, and independent of outward circumstances. If poverty, as some fools seem to judge, made a man vile, how vile were the apostles, who could say, "We hunger, and thirst, and are naked, and are buffeted, and have no certain dwelling-place!" And how vile was He who had not where to lay his head! Nor does he call himself "vile," because he was

diseased, and full of sore boils from the crown of his head to the sole of his foot. The Scripture, indeed, calls the body, "this vile body;" and it is truly humbling, not only in the putrefaction of the grave, but frequently also even in life. How low are some of its appetites! how mortifying some of its infirmities! while some of its diseases are so trying as to require all the force of friendship to discharge the common duties of humanity. But there are no "wounds, bruises, putrefying sores" to be compared with the effects of sin. Nothing is so "vile" as this. This makes us abominable to God himself, and is the only thing that does so; and how loathsome must that be, which causes the Creator to abhor the work of his own hands, and the Father of mercies to punish it with everlasting destruction from his presence, and to refuse to pardon it without the sacrifice of his own Son!

But who makes this confession? Is it a profligate wretch, whose iniquity in its effects has been found to be hateful, even to himself? Is it a penitent, newly awakened, and looking into his own heart, that had been concealed from him before? No; but Job, a saint, and a saint of no ordinary magnitude. You have heard of the patience of Job; and know how he is mentioned by Ezekiel, along with Noah and Daniel, as one of those who were pre-eminently righteous, and how God, the Judge of all, calls him a "perfect and an upright man." Yet this is he who cries, "Behold, I am vile!" And what do we learn from hence, but this—That the most gracious characters are the most remote from vain-glory, and are always more affected with their imperfections than their excellences? The nearer we approach completeness in any thing, the more easily we shall discern, and the more sensibly we shall feel our remaining deficiencies. A little learning puffeth up; but modesty and diffidence attend profound science. The advancing in knowledge is like sailing down a river, which widens as we proceed, till we find ourselves launched on the sea, and losing sight of the shore. Whoever vaunts himself as sinless, Paul did not: "I have not attained," says he, "I am not already perfect;" "I am less than the least of all saints;" "I am the chief of sinners." Not that there is no difference between a saint and a sinner. Job does not mean that he loved sin, or lived in it. His friends accused him of this, but he denied it; and, turning to God, he could

say, "Thou knowest that I am not wicked." But he knew that in many things he offended, and in every thing came short of the glory of God. He was aware of the remains of sin, opposing, hindering, vexing, polluting his renewed mind; and though they appeared not to the view of others in gross transgressions, they were constantly felt by himself in an evil heart of unbelief, prone to depart from the living God, and constraining him to sigh, "Oh wretched man that I am! who shall deliver me from the body of this death?"

And let us observe also, when this acknowledgment was made. It was immediately after God's interposition, and appearance, and address:—"Then the Lord answered Job out of the whirlwind, and said, Who is this that darkeneth counsel by words without knowledge? Gird up now thy loins like a man; for I will demand of thee, and answer thou me." Then he displayed before him some of his works and perfections. "Moreover the Lord answered Job, and said, Shall he that contendeth with the Almighty instruct him? he that reproveth God, let him answer it. Then Job answered the Lord, and said, Behold, I am vile!" Teaching us, that the more we have to do with God, the more we shall see and feel our nothingness and unworthiness. What can make us so sensible of our ignorance, as His wisdom? of our weakness, as His power? of our pollution, as His purity?—the purity of Him in whose sight the very heavens are not clean! Those are struck with little things who have never been abroad to see greater ones; but travelling enlarges the mind, and fills it with new and superior images; so that, on our return, we think nothing of the river, and the hill, and the plain of our native village. The queen of Sheba prided herself upon her magnificence, till she came to Jerusalem and had seen Solomon in all his glory. He that has been introduced to the Lord of all, and has had communion with him, will never think highly of himself again. "The loftiness of man shall be bowed down, and the haughtiness of men shall be made low, and the Lord himself shall be exalted in that day." Ah, said Job, "I have heard of thee by the hearing of the ear, but now mine eye seeth thee. Wherefore I abhor myself, and repent in dust and ashes."

"The more thy glories strike mine eyes,
The humbler I shall lie;

—And I need not be afraid of this: my pride is the only prevention of my happiness.

"Thus while I sink, my joys shall rise
Unmeasurably high."

Jay.

WHY DO YOU LOVE CHRIST?

..... A MEDITATION.

— And is this a question? Then let me endeavour to answer it in godly sincerity: a reply may serve to fan the flame of holy affection, which, I trust, is glowing in my soul.

The tribute of esteem is commonly given to imaginary or real excellence. And to the latter it is assuredly due; to withhold it betrays the dominion of cherished depravity. In this respect, then, Christ is pre-eminent. While he continued in the bosom of the Father, there "dwelt in him all the fulness of the Godhead bodily," and he suffered no loss, he betrayed neither defect nor infirmity during the period of his incarnation. His enemies laboured with rancorous malignity, to fix on him the brand of reproach; but their senseless calumnies left his purity unsullied—his whole character spotless. The testimony of Judas, that he had betrayed "innocent blood;" and of Pilate, that he could "find no fault" in Christ, is but a fragment from the vast mass of evidence which places this fact beyond all controversy.

The life of Jesus was one unbroken and continuous exemplification of the most exalted excellence. Ineffably amiable and touching was his filial piety; his intercourse with men was characterized by a candour the most generous, a prudence the most consummate, an integrity the most complete, and a benevolence the most lofty and expansive. Also, in reference to the Father, an unparalleled glory was derived from an unwavering and ardent devotion, a faith whose constancy could not be shaken, a patience which nothing could disturb, a most prompt and cheerful acquiescence in the Divine will, and a zeal of far too pure and bright a flame to burn on the altar of any heart, but that of the only-begotten and well-beloved Son. Here then is one answer to the inquiry: it is, as I contemplate the Saviour invested with infinite excellence, that while the eye of faith looks within the veil, I am constrained to say, "Whom have I in heaven but thee? And there is none upon earth that I desire besides thee!"

Also for this affection another reason may be assigned. Great, unspeakably great, is the mystery of godliness; God was manifest in the flesh." Yet how did he appear? A palace, a mansion has its resources; but a stable was the birthplace of Jesus, and a carpenter's house the scene of after years. A lonely station may have its shelter, solace, and comfort; but he could say, "The foxes have holes, and the birds of the air have nests; but the Son of man hath nowhere to lay his head." Even poverty may derive consolation from words of kindness; but Jesus was denounced as a Nazarene, a glutton, a wine-bibber, and as one in concert with Beelzebub. Acts of sympathy would supply the failure of language; but "his visage was so marred, more than any man, and his form more than the sons of men." And death may be soft and gentle, though this world's good is not possessed; but such a dissolution was not that of Christ. The victims of justice ordinarily died by hemlock, the sword, or the axe; but Jesus was crucified: thus submitting to a mode of execution the most acute and lingering, and one also of the deepest ignominy—the doom of a felon, the fate of a slave. Yea more, it pleased the Father to "make his soul an offering for sin:" here is the unfathomable depth of his agony; for under its pressure, he whose calm dignity nothing could impair, poured forth one bitter complaint, "My God, my God, why hast thou forsaken me?"

And yet, Jesus was made "perfect through sufferings," that he might become "the Author of eternal salvation." Had he shrunk from the mediatorial work, the whole human race must have perished in their sins; but now he is "all and in all," amidst the lofty ascriptions of those who believe. In consequence of this, his redemption is exhibited by a profusion of imagery. It is illustrated by the genial influence of "the day-spring," the cheering beams of the morning-star, the exhaustless glories of the sun, the fruitfulness of the vine, the stability of the chief corner-stone, and the unchangeableness of the rock. But this is not enough. Behold the bond of the Surety, the testimony of the Witness, the interposition of the Days-man, the care of the Shepherd, the skill of the Physician, the wisdom of the Counsellor, the fidelity of the Brother, the affection of the Husband, the instruction of the

Prophet, the sacrifice and intercession of the Priest, and the power and dominion of the King; and thus passing from figure to figure, from the lifeless to the animate, and from the animate to the highest orders of intelligence, until having derived information from every metaphor, at last thought and language fail, and the soul is lost in contemplating the eternal and infinite Saviour. If, then, excellence demands esteem, here is the strongest claim to the love of gratitude; and this I would humbly offer to Him who shed his precious blood for me.

Nor is this all. The character of a dependent creature will not only be sustained till death, but also for ever and ever. And to whom can I look for the future, but to him who has supplied the wants of the past; and who, with ceaseless regard, is ministering to me now? As a pilgrim, for a longer or shorter period, there will be trials; but, says the apostle, "My God shall supply all your need, according to his riches in glory, by Christ Jesus." I must die; but as he has declared that he "will come again, and receive his followers to himself, I may adopt the language of the Psalmist, "Yea, though I walk through the valley of the shadow of death, I will fear no evil: for thou art with me; thy rod and thy staff they comfort me." I must stand before "the great white throne;" yet why should I tremble? He who is seated thereon, is the elder Brother of the heavenly family; and to all its members he will say, "Come, ye blessed of my Father, inherit the kingdom prepared for you."

Hope, therefore, mingles with esteem and gratitude; I love Christ for what he is, for what he has done, and for what he will yet do. Oh that I loved him more, as he deserves to be loved! Mine is but the affection of a feeble creature; would that it were as ardent as that of a seraph before the throne! And oh, how it would rejoice my heart, if every individual of the human race, could exclaim, with equal regard, The Beloved of your soul is the Beloved of mine!

W.

THE FLY AND THE SPIDER.

It is not without serious and repeated consideration that I venture to charge our modern natural philosophers with a want of impartiality, I do not say, be-

cause I do not think, intentionally, but very generally, pervading their writings in reference to one point. They select from nature what suits their purpose for arriving at a conclusion which they have already determined to arrive at; but they do not take nature as it is. If they did, they would not, from all the premises, derive the desired conclusion. I heard one of them, in a mixed company, expatiate on the goodness, accompanied by obvious tokens of design, manifested in the organization and enjoyment of a fly. He called attention to the relative power of the wings, adapted to soar aloft, and wind and twist, and double through the air, in the animated and happy exercise of all the functions of insect life. He pointed out the little suckers at the end of its legs, by means of which it can, as by so many air pumps, cause a vacuum, and stand as easily on the ceiling as on the floor. He enlarged, with glowing admiration, on the structure of the eye. In a word, he succeeded in conveying to many of his youthful auditors, that from such studies, the wisdom, and goodness, and mercy of the great Creator might be fully and profitably learned. I felt called upon to interpose; aware of the disastrous results produced by such partial representations. I said to him before them all, "Good! so far well; but pray do not stop there. You are a lover of nature, and would not willingly mutilate her charms; be faithful, therefore, in following whithersoever she leads. Look at this spider, possessing bowels adapted to the spinning of a curious web of most exquisite workmanship; he spins, and spreads, and fastens his web in the corner, and your beautiful fly, in the midst of all its meandering enjoyments, puts its little feet on the web. Here the air-pumps are useless. It is caught; it flutters in terror; its wings of power are entangled; it is a helpless captive. The spider is a remorseless tyrant. He does not speedily put an end to his victim. He takes delight in torture. He regales himself on a portion of his victim's blood, and leaves it in unfinished anguish." The argument is a grave one. The spider supplies as complete a proof of design as the fly. But the character of the design becomes embarrassing. For surely if the life and enjoyment of the fly prove design of kindness, then its torment and death prove equally design of unkindness. And is the same designer both kind and

unkind? Has he equal pleasure in the enjoyment and the agony—the life and death of his creatures? What can nature reply? Without the Bible, nature is dumb. Is not the plain, simple, undoubted inference of unassisted reason, confined to the study of creation, that there are at least two designers, one good and one evil? And what is the next inevitable step? Throughout nature, life and enjoyment come first, then come pain and suffering, and the end is death. In other words, the designer of kindness accomplishes his benevolent plans for a little time, and in every instance is eventually defeated by the designer of unkindness. The universal conqueror must be pronounced supreme. And thus, the philosopher who confines his studies to fallen nature, if he will be but honest and impartial in the examination of his book, is driven by his own weapons to the acknowledgment of the sovereignty of evil. I am aware that our philosophers repudiate any such conclusion, and that they do so with all sincerity. But the reason is, that they have derived, without perceiving it, instruction from the Bible. Before they commence their observations on nature, they know the general conclusion with regard to the one great God which ought to be drawn: and this light of revelation insensibly guides them to a selection of favourable incidents rather than an impartial and adequate induction of real facts. The same reasoning would apply to the history of the world as a subject of study, the conclusion apparently to be drawn from the facts would not be the true one, because the book is blotted, and the vision of the reader is imperfect.

"That vice should triumph, virtue vice obey,
There sprung a doubt of Providence's sway."

It is in the Bible, and the Bible alone, that God is truly revealed, and the groanings of creation and the mystery of iniquity explained.—*M. Neile.*

DAGUERRE'S DISCOVERY.

It was manifest at once, says a correspondent, that M. Daguerre's method of producing pictures was altogether different from any thing I had seen or heard of in England: the pictures were as perfect as it is possible for pictures to be without colour, and although they did not possess this advantage, its absence was scarcely felt, as the truth,

distinctness, and fidelity of the minutest details were so exquisite, that colour could have added little to the charm felt in contemplating them; the best idea I can give of the effect produced is, by saying, that it is nearly the same as that of views taken by reflection in a black mirror. All the specimens I saw were on hard, plane, polished surfaces; none were on paper, and, in fact, the finest paper is incapable of receiving or conveying the delicate details, which (on examination by the microscope) the pictures are found to contain—the smallest crack, a withered leaf, or a little dust, which a telescope only will detect on a distant building, will be found in M. Daguerre's pictures, when sought for with the aid of a high magnifying power.

One set of specimens shown to us, consisted of three pictures of the same portion of the Boulevard, taken, one of them at early morning, one at mid-day, and one in the evening. I could not have anticipated so marked a difference in the tone and aspect of three representations of the same objects; yet, though they differed so much in aspect, that it required examination to be satisfied of the identity, the same examination soon impressed me with the truth of the pictures, although they differed from the conventional tones used by artists to represent the same effects. Another very interesting specimen was the view of a street taken during a heavy fall of rain; this was so accurately rendered, that the plate seemed wet: this effect, I think, arose from many portions of the objects which were wetted by the rain, being so situated in regard to the plan of the camera obscura in which the view was taken, that they gave total reflection of the light falling on them, and thus glistened while the rest of the picture was unusually obscure. No artist could have hit off this effect with sufficient exactness to tell in a picture.

There is one point in which these pictures have a striking dissemblance from nature, namely, the deserted appearance they give to the busiest thoroughfares; nothing which moves onwards leaves a sensible trace behind, and the stones of the causeway, or the "Seyssel" of the asphalté trottoirs, are nearly as distinct in the pictures, as if no one passed over them. If a body of military, so numerous, that their passage would

occupy the whole time employed to form the picture, were to be passing, a confused trace would be made in it, but still a representation of the roadway would be perceptible. Waving objects made confused images; but even living objects, if they remain motionless during the short periods of exposure, are given with perfect fidelity. A waiting *fiacre* (hackney coach) is generally found to give a perfect picture. I also observed a curious specimen of a *décrotteur* (shoe-black) at work on a gentleman's boot; the gentleman was seated, and was very distinct, excepting his head and hat, which showed, that in speaking he had nodded; the shoe-black was all right except the right arm and brush, which made a vague blot, through which the gentleman's foot could be distinguished. In one specimen which had been exposed only thirty seconds, the plate was still intensely black, excepting in the sky, and in some portions of buildings which were just beginning to be visible: the effect was that of looking out at the first dawn of day, when, under a grey sky, white objects begin to peer through the obscurity of night.

I shall conclude by saying, that M. Daguerre's discovery appears to me to be of great value, and directly applicable to useful purposes, as by means of it original pictures of unquestionable fidelity may be obtained from the most intricate objects, at a trifling expense, and by persons otherwise incapable of taking a sketch. Such pictures may then be multiplied by the engraver's art, and the public obtain illustrations of the highest excellence at a moderate cost. A miniature painter, instead of confining his subject to irksome sittings, may in two minutes take a perfect likeness in light and shade, and may at his leisure transfer this to ivory, with the advantage of colour from his pallet.

I am, etc. J. R.

The truth is, that M. Daguerre's process is so little understood, that it is scarcely possible to find words clearly to express the kind of effect which the works produce. M. Daguerre's pictures are not, like the paintings of many artists, so imperfect, that you must view them only from one point, and not approach nearer lest the illusion should vanish; on the contrary, you feel that you have a treasure before you, which affords stores of delineated beauty, which all the powers of sense, even

when assisted by a microscope, are unable to exhaust. Our correspondent mentioned in conversation, that in the studio of M. Daguerre is a small plaster head of the Jupiter of the Capitol, which had served as a subject to the artist in various positions. In one of these pictures he noticed with the microscope, a small black streak across the nose, which he had not seen in the cast; it was apparently a small chip or crack; but on looking again at the original, no such thing was visible, until at last he succeeded in placing it in a light, in which the shadow of the upper side of a minute crevice was seen upon close inspection.—*Athenæum*.

INFLUENCE OF A MOTHER.

By his vivacious disposition, Samuel Drew seemed altogether unfitted to receive instruction through the ordinary channel. This his invaluable mother soon perceived, and therefore took him under her own charge. From her, principally, he acquired the ability to read, and to her and his brother he was indebted for the little knowledge of writing he attained in childhood.

But there was a more important species of instruction which this excellent woman was anxious to communicate to her children. Their moral cultivation she justly regarded as of the highest moment, even superior to the most necessary parts of human learning, especially in the early dawning of reason. Scientific knowledge may be more or less advantageous in after life; but all men are responsible as moral agents, and parents, however, circumstanced, are unquestionably bound to teach their children their duty to God and man. The knowledge that relates to the ordinary concerns of life may be forgotten: correct principles, once infused into the mind, and clearly apprehended there, can never be eradicated. They may be neglected, they may be perverted; but the consciousness of their truth will remain: for the judgment recognises, and the conscience approves, what the will too often disavows. The seeds of some plants retain their vital principle to an unknown period. For many years they may remain buried in the soil, at a depth unfavourable to vegetation, and show no sign of vitality or corruption; but when placed under the influence of fertilizing showers, and the solar rays, their germin-

ating powers will be called forth, and they will presently spring up into light and life.

With what success the labours of Mr. Drew's mother were attended, was not immediately, nor for many years seen; but when her son attained to manhood, the fruits of her teaching became evident. How deep was the impression made on his mind at the tender age at which she became his tutor, careless and thoughtless as he seemed to be, will best appear in the intense feeling in which his recollections of her were always imbued.

"I well remember," he said but a few weeks before his decease, "in my early days, when my mother was alive, that she invariably took my brother and me by the hand, and led us to the house of prayer. Her kind advice and instruction were unremitting; and even when death had closed her eyes in darkness, the impression remained long upon my mind, and I sighed for a companion to accompany me thither. On one occasion, I well recollect, we were returning from the chapel at St. Austell, on a bright and beautiful starlight night, when my mother pointed out the stars as the work of an Almighty Parent, to whom we were indebted for every blessing. Struck with her representation, I felt a degree of gratitude and adoration which no language could express, and through nearly all the night enjoyed ineffable rapture."

It was the will of a mysterious Providence, in 1774, to remove this affectionate parent, by consumption, from her sorrowing family. She was then, according to a memorandum of her husband, about forty-four years of age, and her son Samuel about nine. Though of a rude and reckless disposition, he was not without experiencing the utmost anguish at his mother's death. Even minute circumstances, relative to his bereavement, were deeply fixed in his memory; for he once said to a friend, "When we were following my mother to the grave, I well recollect a woman observing, as we passed, 'Poor little things! they little know the loss they have sustained!'" His sensations, on this event, seemed never to have been forgotten.

Several years after, he says in a letter to a literary gentleman, who had kindly interested himself in his welfare, and wished to know the history of his early life, "On visiting my mother's grave, with one of my children, I wrote the

following. The first couplet is supposed to be spoken by the child.

"Why looks my father on that lettered stone,*
And seems to sigh with sorrow not his own?
'That stone, my dear, conceals from human eyes
The peaceful mansion where thy mother lies.
Beneath this stone (my infant do not weep!)
The shrivelled muscles of thy mother sleep.

"And soon, my babe, the awful hour must be
When thy sad soul will heave a sigh for me,
And say, with grief, amidst thy sisters' cries,
Beneath this stone our lifeless parent lies.
Shouldst thou, my dear, survive thy father's
doom,
And wander pensive near his silent tomb,
Think thy survivors will perform for thee,
What I do now, and thou wilt then for me."

That one who, like this pious female, had "lived the life," would also "die the death of the righteous," every reader will naturally anticipate. Her trust in the atonement was firm; the evidence of her acceptance clear; her death triumphant. She departed this life in the full assurance of faith.—*Life of Rev. S. Drew.*

SINGULAR CUSTOM.

In all Turkish towns are found a vast number of skeletons of the domestic animals, affording ample opportunity for studying the anatomy of the camel, cow, horse, ass, and ox; the dogs begin, and the sun and wind complete, the bleaching of the skeleton. The head of the ox alone escapes this fate; in cultivated districts it is placed on a stick, or hung on a tree as a scare-crow. This custom prevails in Greece as well as here; the heads are always beautifully white, and retain the horns, which are in this part of the world exceedingly short and thick. The skull, with its horns, has thus been constantly presented to the eye of the Greek artist blanching white as marble, and hence the introduction of precisely this figure in the friezes of their architecture; and perhaps the vine or clematis wreathing about the horns may have suggested the frequent accompaniment of this ornament. It appears to me the more evident that this is the real origin, from its being the skeleton of the head that is depicted. Had the figure been in honour of, or connected with the worship of the Bull, why not have exhibited the living head which is rarely given?—*Fellows.*

* "Stone" is a mere poetical figure. My mother's grave has no such ornament. I wrote these lines from the impulses of my own feelings, and the dictates of nature, before I was acquainted with the rules of art, and the orderly method of composition.



1377-700

